

KENWOOD

AUDIO VIDEO SURROUND RECEIVER

KR-V9090
KR-V8090

INSTRUCTION MANUAL

KENWOOD CORPORATION

This manual contains instructions for two models.
Model availability and features (functions) may differ depending on country and sales area.

About the supplied remote control . . .

Compared to standard remote controls, the remote control supplied with this receiver has several operation modes. These modes enable the remote control to control other audio/video components. In order to effectively use the remote control it is important to read the operating instructions and obtain a proper understanding of the remote control and how to switch its operation modes (etc.). Using the remote control without completely understanding its design and how to switch the operation modes may result in incorrect operations.

Before applying the power

Units are designed for operation as follows.

U.K. and Europe AC 230 V only

For the United Kingdom

Factory fitted moulded mains plug

1. The mains plug contains a fuse. For replacement, use only a 13-Amp ASTA-approved (BS1362) fuse.
2. The fuse cover must be refitted when replacing the fuse in the moulded plug.
3. Do not cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or adapter, or consult your dealer. If nonetheless the mains plug is cut off, remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

Blue : Neutral
Brown : Live

Do not connect those leads to the earth terminal of a three-pin plug.

REQUIREMENT BY NEDERLAND GAZETTE

Batteries are supplied with this product. When they empty, you should not throw away. Instead, hand them in as small chemical waste.



Safety precautions

WARNING : TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

| | | | |
|--|---|--|---|
| | CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN | | CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. |
| | THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS. | | |
| | THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE. | | |

Unpacking

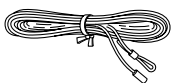
Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost.

Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

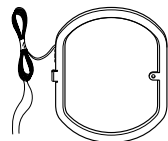
We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

Accessories

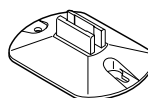
FM indoor antenna (1)



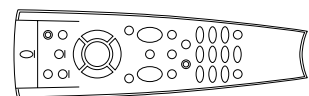
AM loop antenna (1)



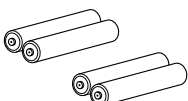
Loop antenna stand (1)



Remote control unit (1)



Batteries (R03/AAA) (4)





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Caution : Read the pages marked  carefully to ensure safe operation.

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Remote Control

Remote Control

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Other

True home theater sound

This receiver incorporates a wide variety of surround modes to bring you maximum enjoyment from your video software. Select a surround mode according to your equipment or the software you are going to play and enjoy! → [32](#)

Dolby Pro Logic & Dolby 3 Stereo

This surround system reproduces theater-like surround sound from video software marked .

The PRO LOGIC mode uses the built-in directivity enhancer circuit to control the Left, Center, Right and Surround channel audio signals and reproduce a real sense of sound motion.

The 3 STEREO mode uses the directivity enhancer circuit to provide proper acoustic positioning and a real sense of sound motion even when only the front and center speakers are used.

New DSP surround modes

The DSP (Digital Signal Processor) used for this receiver incorporates a variety of high quality adjustable sound fields, like "ARENA", "JAZZ CLUB" and "STADIUM", to add the "presence" associated with an arena, jazz club or stadium to the original signal. It is compatible with almost any kind of program source.

Universal IR (InfraRed) remote control

In addition to the basic receiver operations, the remote control supplied with this receiver can also operate almost all of your remote controllable audio and video components. Just follow the simple setup procedure to register the components you have connected. → [35](#)

Dual IR emitters

This remote control has two IR emitters: one to send commands in a straight line over long distances, allowing you to control the receiver and your other components from farther away; and one for wide dispersion of commands in a closer proximity, for near-field operation even when the remote control is not pointed directly at the respective component. → [13](#)

MACRO play

The MACRO function lets you perform a series of operations automatically, like turning ON the power of the receiver and connected components, switching the input selectors, and starting playback. (Be sure to register your components before starting the macro set up procedure.) → [39](#) → [41](#)

FutureSet, automatic update feature (KR-V9090 only)

This function lets you update the remote control so it can operate new components which do not appear in the setup code list at the end of the manual. Therefore, the remote control will always be compatible. → [43](#)

RDS (Radio Data System) tuner

The receiver is equipped with a RDS tuner that provides several convenient tuning functions: RDS Auto Memory, to automatically preset up to 40 RDS stations broadcasting different programs; station name display, to show you the name of the current broadcast station; and PTY search to let you tune stations by program type. → [26](#)

PTY (Program TYPe) search

Lets you tune stations by specifying the type of program you want to hear. → [28](#)

EON (Enhanced Other Networks) reservation

The EON function lets you monitor information on other stations so you can receive traffic, news, or information programs as soon as they are broadcast, even they are broadcast on a station different from the one you are currently listening to. When the broadcast ends, the receiver returns to the original station. When listening to Kenwood source components connected with system control cords, the input selector on the receiver automatically switches to the tuner when a program you desire is broadcast. → [30](#)

New TRAITR transistor adopted in the final stage

A new TRAITR transistor which features superior temperature tracking characteristics has been adopted in the final stage of the power amplifier block. This new TRAITR transistor combines a temperature compensation resistor with an emitter resistor and final transistor to provide ideal temperature compensation characteristics and minimize distortion caused by temperature variations.

How to use this manual

This manual is divided in to four sections, **Preparations, Operations, Remote Control, and Other.**

Preparations

Shows you how to connect your audio and video components to the receiver and prepare the surround processor.

We've tried to make setting up your system as easy as possible. However, since this receiver works with all of your audio and video components, connecting the system can be fairly complex.

Operations

Shows you how to operate the various functions available from the receiver.

Remote Control

Shows you how to operate the various functions available from the remote control.

We've designed this remote control to integrate your entire audio/video system and let you operate all of your entertainment components — your TV, VCR, LD player, CD player, etc. Remember that before you can use the remote control to operate these components, they must be registered with a proper setup code.

Other

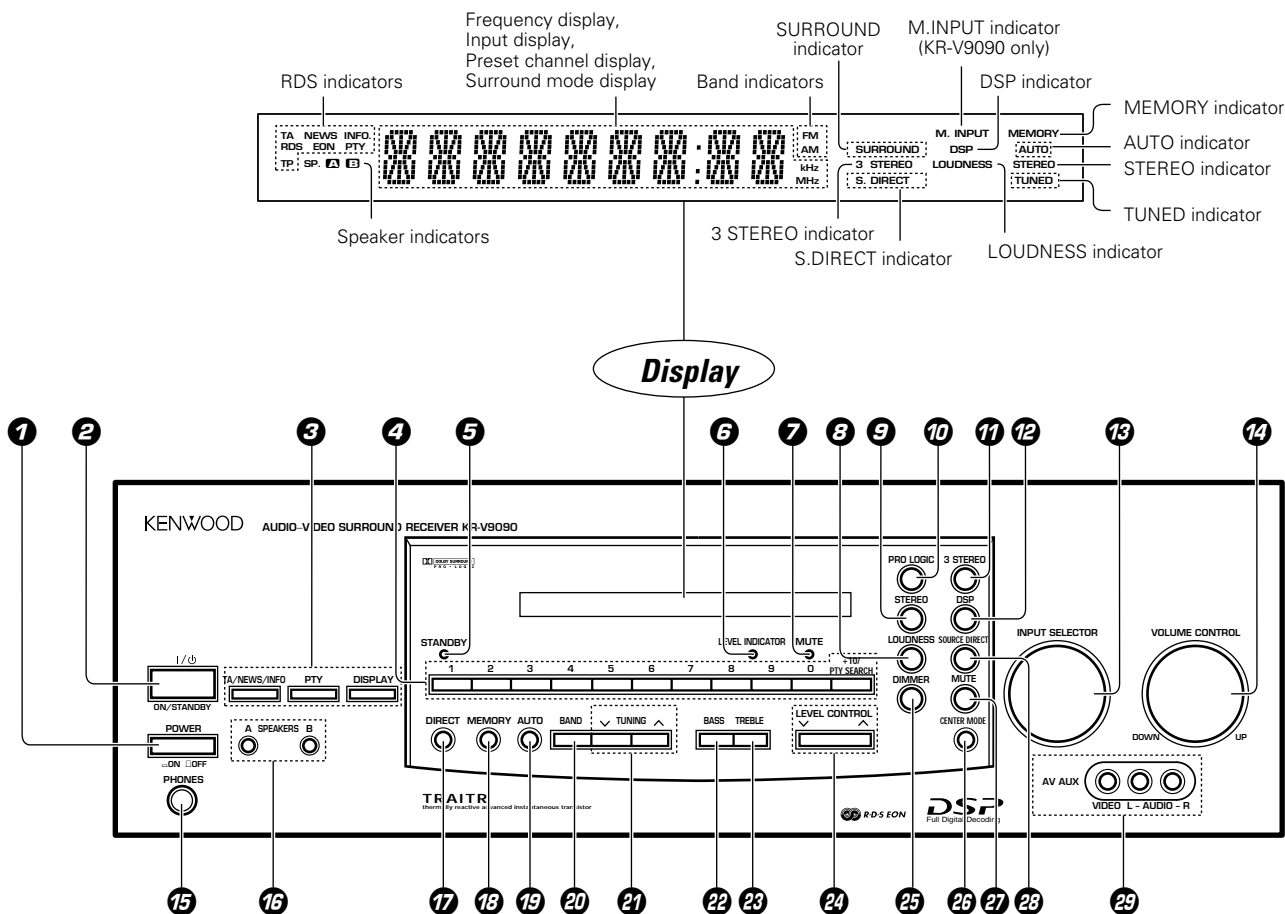
Includes additional information such as; a list of setup codes for registering your other components, a troubleshooting guide, specifications, and a reference guide to the remote operations available for registered components.

Names and functions of parts

KR-V9090/8090 (En/T)

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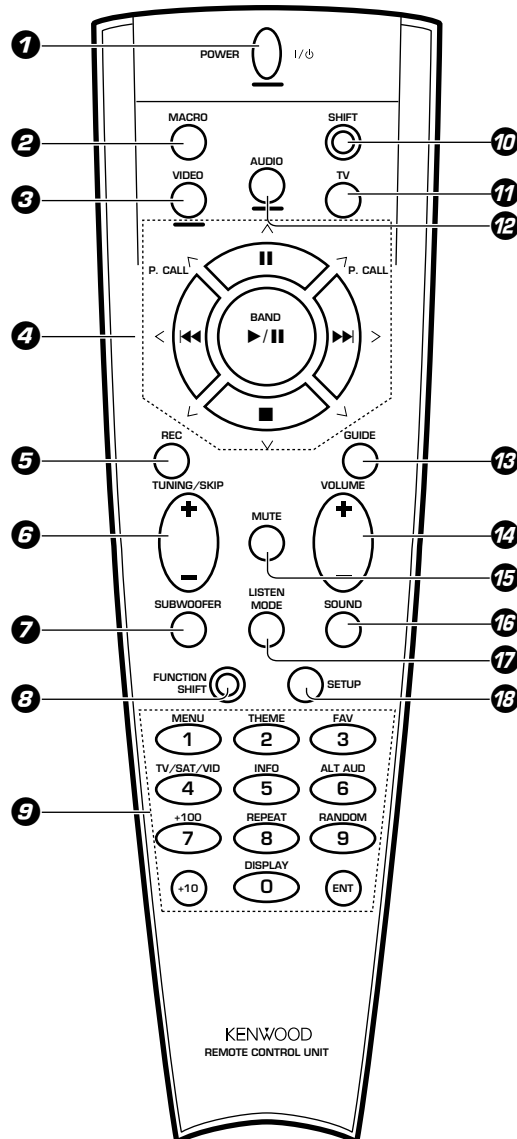
Preparations



- 1 POWER key** → 18
Use to turn the main power ON/OFF.
- 2 ON/STANDBY (I/φ) key** → 18
Use to switch the power ON/STANDBY when the POWER is turned ON.
- 3 RDS keys** ∞ → 28 → 30
- 4 Numeric keys**
- 5 STANDBY indicator**
- 6 LEVEL indicator** → 17
Lights when the level of the signal being input is too high.
- 7 MUTE indicator** → 19
- 8 LOUDNESS key** → 19
Use to activate the frequency weighting network.
- 9 STEREO key** → 33
Use to cancel the surround mode.
- 10 PRO LOGIC key** → 33
Use to turn on the DOLBY PRO LOGIC mode.
- 11 DOLBY 3 STEREO key** → 33
Use to turn on the DOLBY 3 STEREO mode.
- 12 DSP key** → 33
Use to turn on, or switch, the DSP mode.
- 13 INPUT SELECTOR knob** → 18
Use to select the input sources.
- 14 VOLUME CONTROL knob** → 18
- 15 PHONES jack** → 20
Use for headphone listening.
- 16 SPEAKERS A/B keys** → 18
Use to turn the speakers ON/OFF.
- 17 DIRECT key** → 24
Use to tune radio stations directly by numerical input.
- 18 MEMORY key** → 26 → 27
Use to store radio stations in the preset memory.
- 19 AUTO key** → 23
Use to select the auto tuning mode.
- 20 BAND key** → 23
Use to select the broadcast band.
- 21 TUNING keys** → 23
Use to tune in radio broadcasts.
- 22 BASS key** → 19
Use when adjusting the bass tone.
- 23 TREBLE key** → 19
Use when adjusting the treble tone.
- 24 LEVEL CONTROL keys** → 19
Use to adjust the level of the selected tone.
- ∞ **DIMMER key**
Use to adjust the brightness of the display.
- 25 CENTER MODE key** → 14
Use to select the center mode.
- 27 MUTE key** → 19
Use to mute the sound.
- 28 SOURCE DIRECT key** → 20
- 29 AV AUX jacks** → 10

About the STANDBY indicator

This unit has a **STANDBY** indicator. When the **STANDBY** indicator is lit, the unit consumes a small amount of power to preserve the memory. This is called STANDBY mode. This mode also lets you turn the power ON using the remote control.



- 1 POWER key** → 37
Use to turn the receiver on and off.
Use in combination with the input selector (AUDIO, VIDEO, or TV) keys and SHIFT key to turn various components on and off.
- 2 MACRO key** → 39
Use in combination with the AUDIO, VIDEO, or TV keys to execute a series of commands automatically (MACRO PLAY).
- 3 VIDEO selector key** → 35
Selects the video inputs (VIDEO 1, VIDEO 2, VIDEO 3, AV AUX) and sets the remote to operate the component registered at the respective input.
- 4 Multi control keys** → 58
Use to operate the selected component.
- 5 REC key** → 58
Use to operate the selected component.
- 6 TUNING/SKIP key** → 14 → 58
Use during the setup procedure to specify various settings. Use to operate the tuner or selected component.
- 7 SUBWOOFER key** → 34
Use in combination with the VOLUME +/- keys to adjust the volume of the subwoofer.

- 8 FUNCTION SHIFT key** → 58
Use in combination with the numeric keys to execute alternate commands.
- 9 Numeric keys** → 58
Provide functions identical to those of the original remote supplied with the component you are controlling.
To access the functions printed above the keys, Press within 3 seconds of pressing the FUNCTION SHIFT key. Function availability varies for each component.
- 10 SHIFT key** → 35
Use in combination with the AUDIO and VIDEO keys to change the remote control mode without changing the input selector or in combination with the POWER key to turn on and off components programmed into the remote.
- 11 TV selector key** → 35
Sets the remote to operate a TV or cable box (TV 1, TV 2, CABLE). This key does not change the input selector on the receiver.

- 12 AUDIO selector key** → 35
Selects the audio inputs (CD, TAPE/MD, TUNER, PHONO) and sets the remote to operate the respective KENWOOD audio component.
If you connect audio components from KENWOOD and other makers to the TAPE/MD or CD jacks, you can set the remote to operate these components by registering the appropriate setup code at the respective input.
- 13 GUIDE key** → 58
Use to activate the OSD menu functions of registered components.
- 14 VOLUME key** → 18
Use to adjust the receiver volume.
- 15 MUTE key** → 19
Use to temporarily mute the sound.
- 16 SOUND key** → 17
Use to adjust the bass, treble, and input level.
- 17 LISTEN MODE key** → 34
Use to select the desired surround mode.
- 18 SETUP key** → 14
Use to adjust the surround setup.

Connecting the antennas

Make connections as shown below.

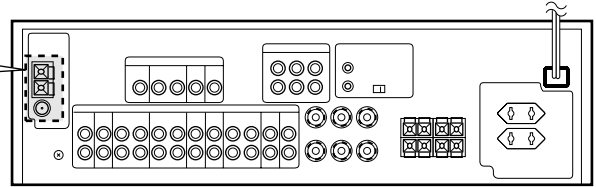
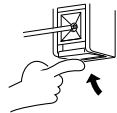
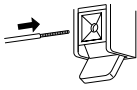
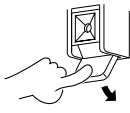
Do not connect the power cord to a wall outlet until all connections are completed.

Antenna terminal connections

➊ Push lever.

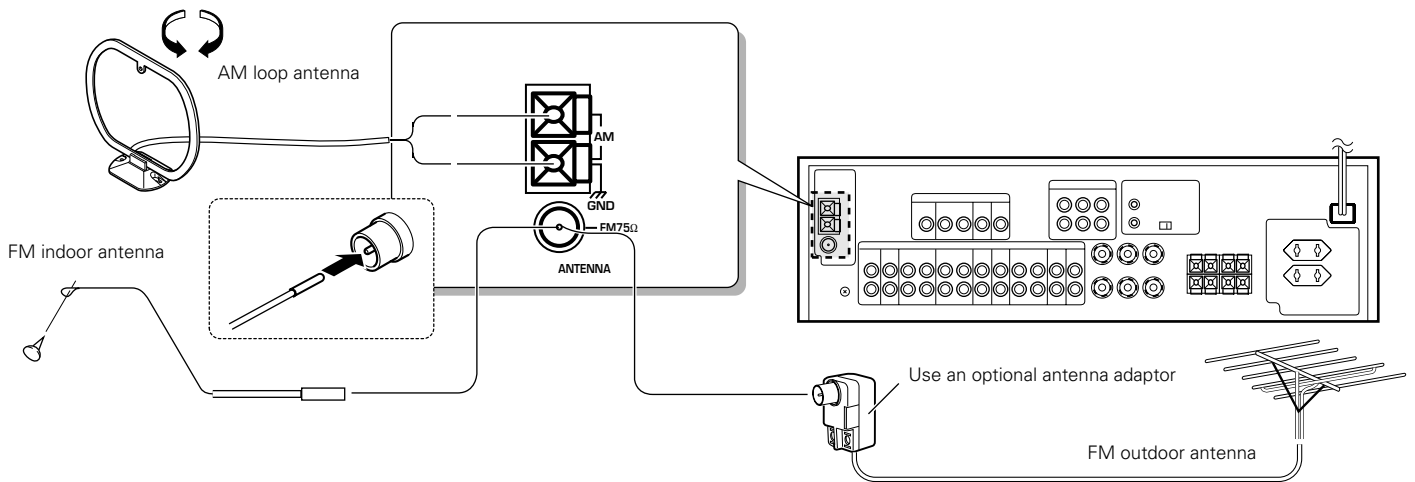
➋ Insert cord.

➌ Return lever.



AM loop antenna

The supplied loop antenna is for use indoors. Place it as far as possible from the receiver, TV set, speaker cords and power cord, and adjust the direction for best reception.



FM indoor antenna

The supplied indoor antenna is for temporary use only. For stable signal reception we recommend using an outdoor antenna. Disconnect the indoor antenna when you connect one outdoors.

FM outdoor antenna

Lead the 75Ω coaxial cable connected to the FM outdoor antenna into the room and connect it to the FM 75Ω terminal.

Connecting audio components

Make connections as shown below.

When connecting the related system components, be sure to also refer to the instruction manuals supplied with the components you are connecting.

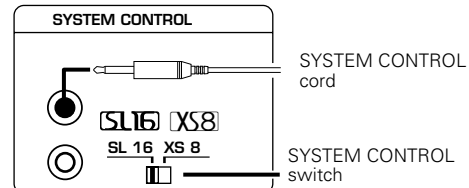
Do not connect the power cord to a wall outlet until all connections are completed.

Microcomputer malfunction

If operation is not possible or an erroneous display appears, even though all connections have been made properly, reset the microcomputer referring to "In case of difficulty". → 55

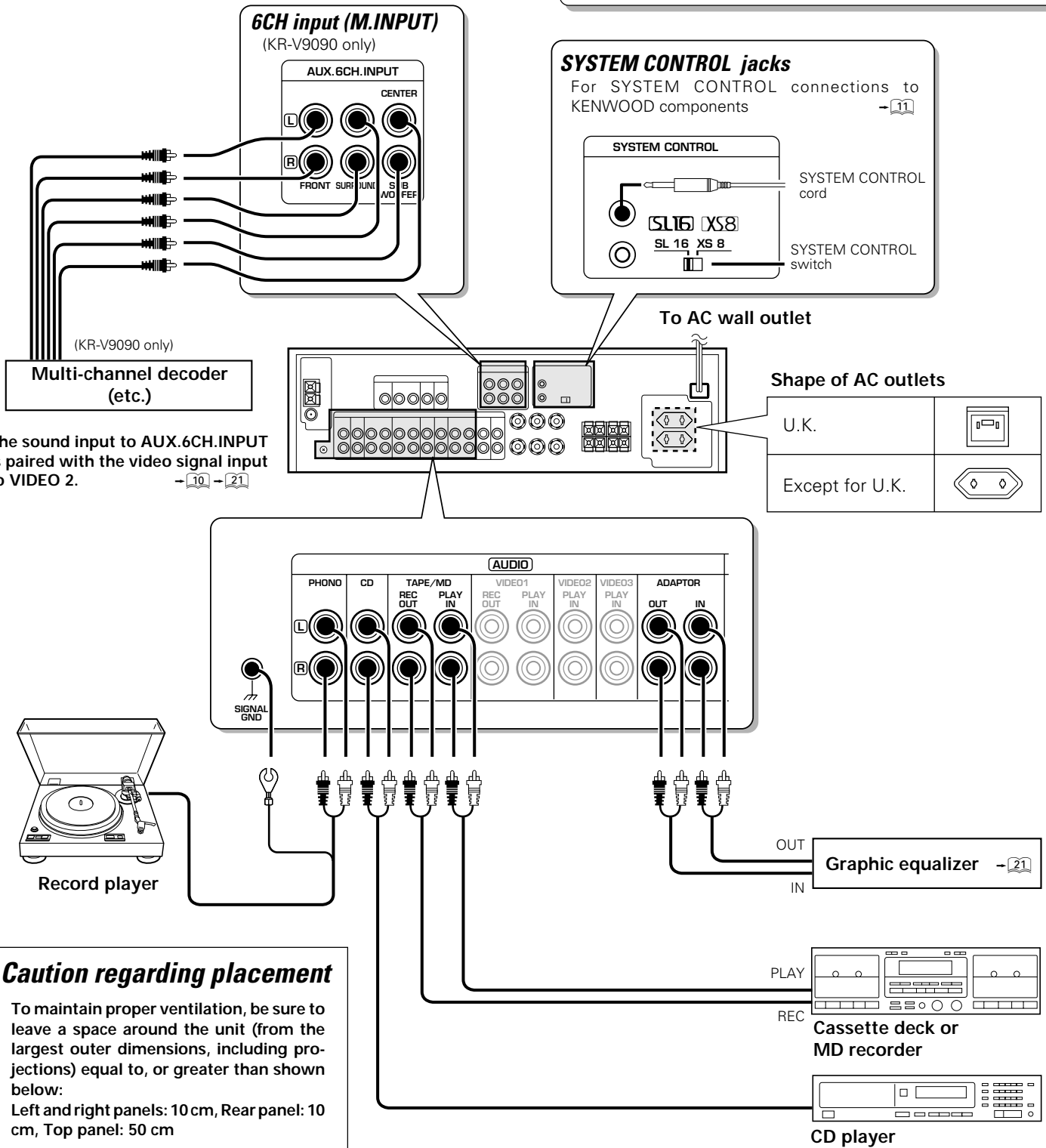
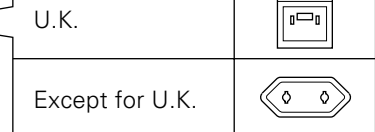
SYSTEM CONTROL jacks

For SYSTEM CONTROL connections to KENWOOD components → 11



To AC wall outlet

Shape of AC outlets



The sound input to AUX.6CH.INPUT is paired with the video signal input to VIDEO 2. → 10 → 21

Caution regarding placement

To maintain proper ventilation, be sure to leave a space around the unit (from the largest outer dimensions, including projections) equal to, or greater than shown below:

Left and right panels: 10 cm, Rear panel: 10 cm, Top panel: 50 cm



1. Connect all cords firmly. Loose connections may prevent proper sound transmission or produce noise.
2. Be sure to remove the power cord from the AC outlet before plugging or unplugging any connection cords. Plugging / unplugging connection cords without disconnecting the power cord can cause malfunctions and may damage the unit.
3. Do not connect power cords from components whose power consumption is larger than what is indicated on the AC outlet at the rear of this unit.

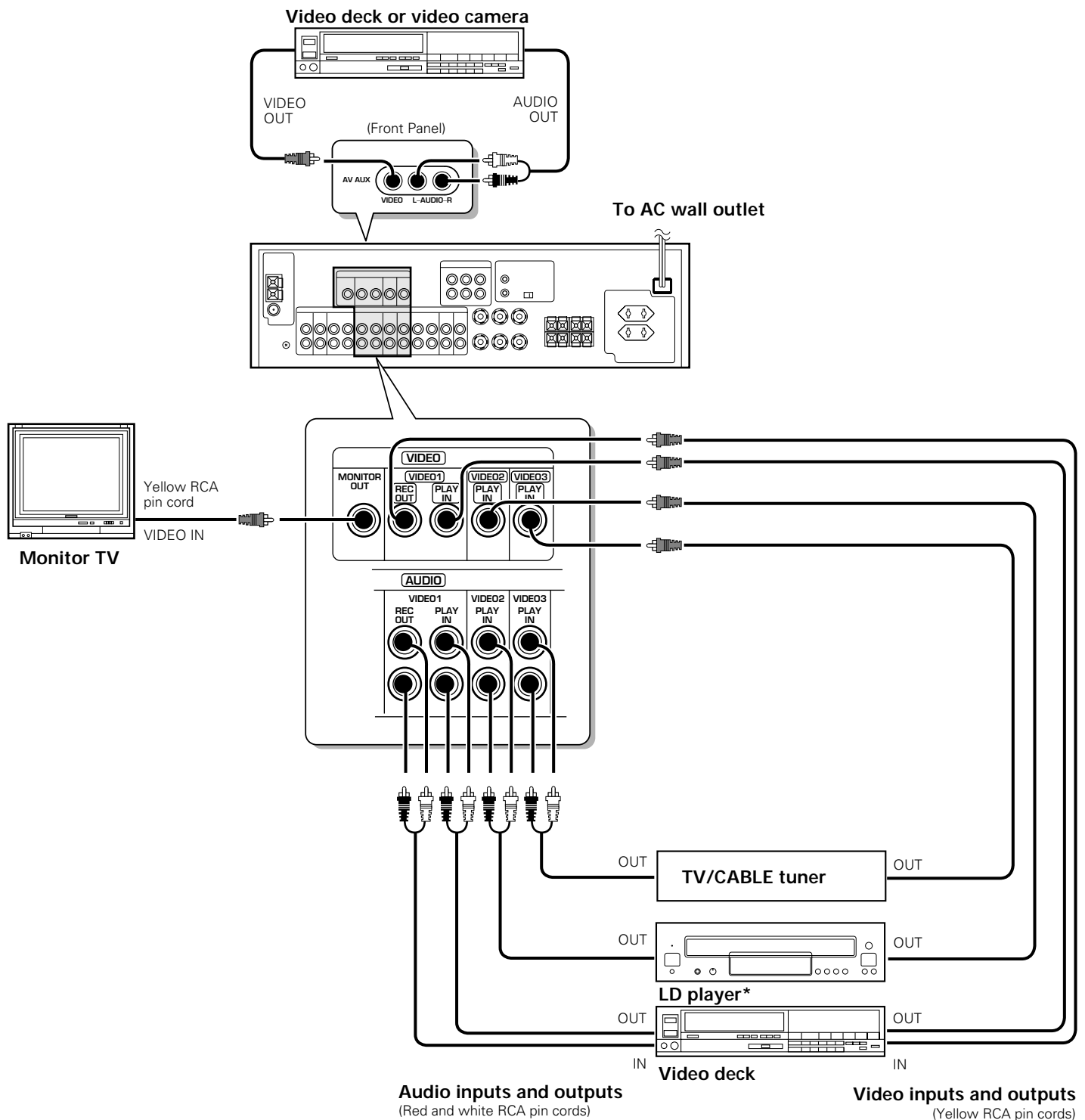
10 Connecting video components

Make connections as shown below.

When connecting the related system components, be sure to also refer to the instruction manuals supplied with the components you are connecting.

Do not connect the power cord to a wall outlet until all connections are completed.

Preparations



* The video signal input to the VIDEO 2 jacks can be paired with audio signals input to the AUX.6CH.INPUT.

Connecting the system control

Connecting system control cords after connecting a KENWOOD audio component system lets you take advantage of convenient system control operations. There are two KENWOOD system control modes. Make connections according to the groups of terminal symbols shown below.

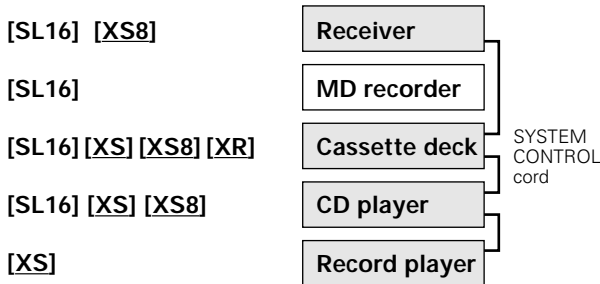
[XS8] Mode : lets you combine [XS], [XS8], and [XR] terminals

[SL16] Mode : for [SL16] terminals only

This unit is compatible with both [XS8] and [SL16] modes. It comes from the factory set to the [SL16] mode. To switch to the [XS8] mode, follow the instructions in "SWITCHING FROM [SL16] TO [XS8]" below.

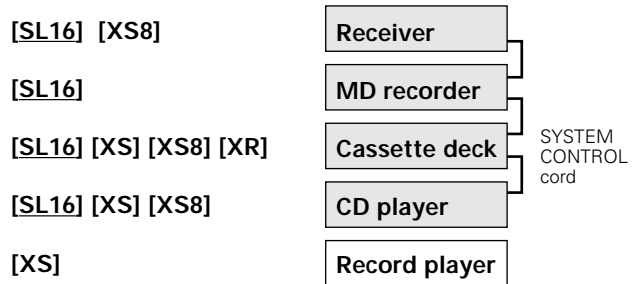
EXAMPLE: [XS8] mode connections

The underlined portion represents the setting of the system control mode.



EXAMPLE: [SL16] mode connections

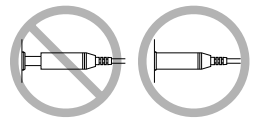
The underlined portion represents the setting of the system control mode.



- In order to take advantage of the system control operations, the components must be connected to the correct jacks. To use a CD player it must be connected to the CD jacks. To use a cassette deck (or MD recorder) it must be connected to the TAPE/MD jacks. When using more than one CD player (etc.) only the one connected to the specified jacks may be connected for system control.
- Some CD players and cassette decks are not compatible with the [SL16] system control mode. Be sure to use the [XS8] system control mode when making system connections with equipment that is not [SL16] compatible.
- Some MD players are not system control compatible. You cannot make system control connections to this kind of equipment.



1. [SL16] equipment cannot be combined with [XR], [XS], and [XS8] equipment for system operations. If your equipment consists of this kind of combination, please do not connect any system control cords. Even without system control cords, normal operations can be carried out without effecting performance.
2. Do not connect system control cords to any components other than those specified by KENWOOD. It may cause a malfunction and damage your equipment.
3. Be sure the system control plugs are inserted all the way in to the system control terminals.



SYSTEM CONTROL OPERATIONS

Remote Control

Lets you operate this unit with the system remote supplied with the receiver.

Automatic Operation (except [XR] equipment)

When you start playback from a source component, the input selector on this unit switches to that component automatically.

Synchronized Recording (except [XR] equipment)

Lets you synchronize recording with the start of playback when recording from CD, MD or analog discs.

SWITCHING FROM [SL16] TO [XS8]

You can easily change the system control mode by adjusting the position of the SYSTEM CONTROL switch on the rear panel. Do this operation after completing all connections.

For [SL16] SL 16 XS 8 For [XS8]



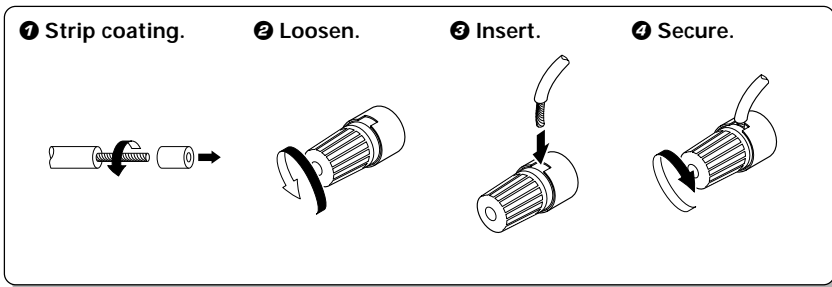
- This operation will not effect items stored in the memory.
- After switching the system control mode, turn the power off and then on once to confirm the new setting.

Registering setup codes for KENWOOD audio components

- Once you finish making the system connections, be sure to register the appropriate setup code for each component. → 35
- If you own remote controllable KENWOOD audio components that are not compatible with system control (or cannot be combined with your other system control components), registering the setup code enables you to control those components using the remote control supplied with this unit (without connecting system control cords). To register setup codes for your remote controllable KENWOOD audio components, see "Registering setup codes for other components". → 35

1 2 Connecting the speakers

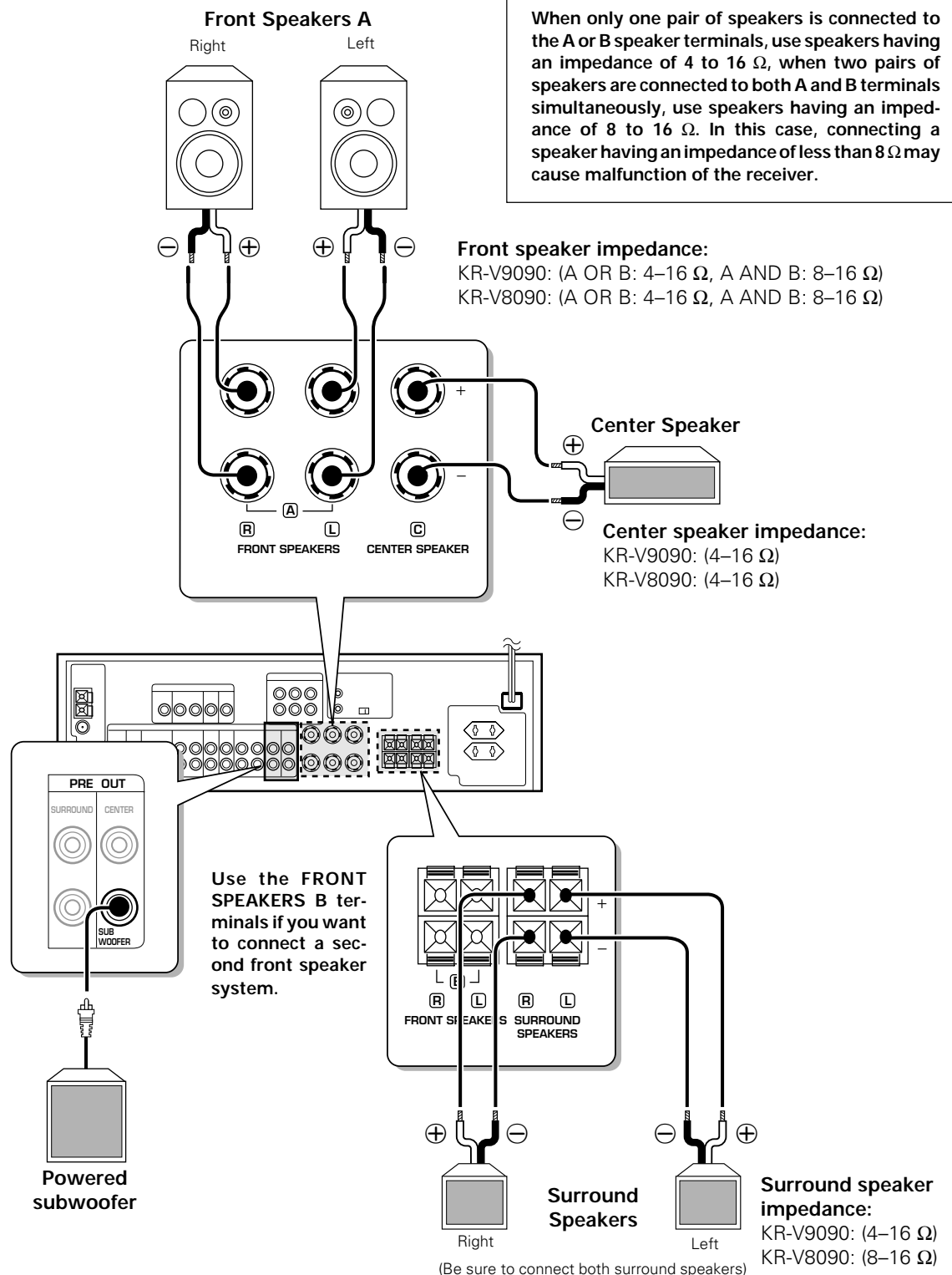
Preparations



- Never short circuit the + and – speaker cords.
- If the left and right speakers are connected inversely or the speaker cords are connected with reversed polarity, the sound will be unnatural with ambiguous acoustic imaging. Be sure to connect the speakers correctly.
- To emphasize deep bass sounds, connect a subwoofer as desired.

Speaker impedance

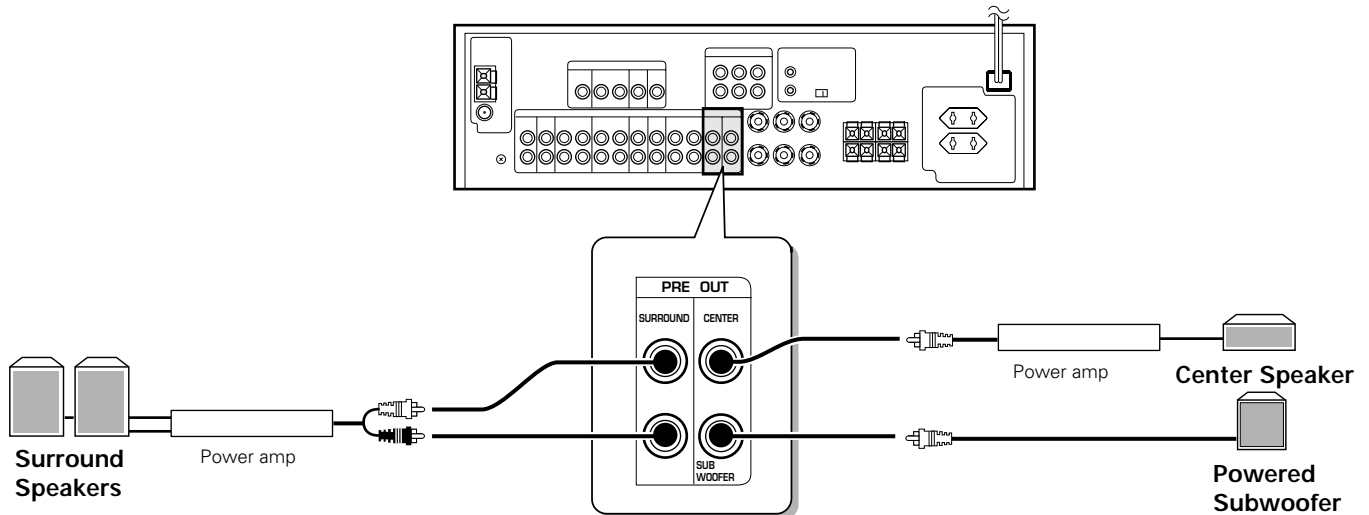
When only one pair of speakers is connected to the A or B speaker terminals, use speakers having an impedance of 4 to 16 Ω, when two pairs of speakers are connected to both A and B terminals simultaneously, use speakers having an impedance of 8 to 16 Ω. In this case, connecting a speaker having an impedance of less than 8 Ω may cause malfunction of the receiver.



PRE OUT connections

This receiver has additional preout jacks. These can be used for various purposes, but will need to be connected to an external power amplifier as shown in the example below. Connecting a speaker cord directly to a PRE OUT jack will not produce any sound from the speaker.

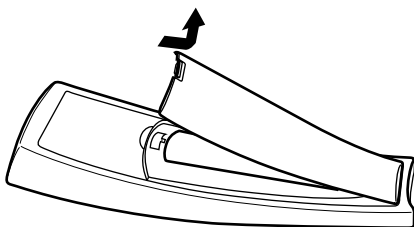
Be sure to set one of the SPEAKERS keys (either A or B) to the ON position when using the PRE OUT jacks.



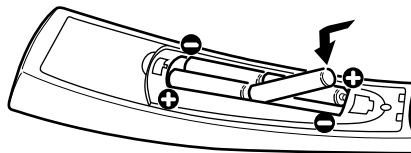
Preparing the remote control

Loading the batteries

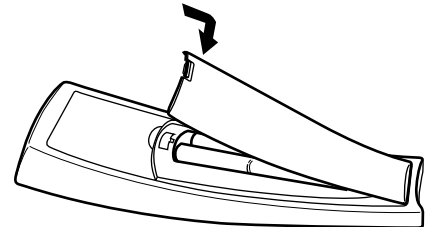
1 Remove the cover.



2 Insert the batteries.



3 Close the cover.

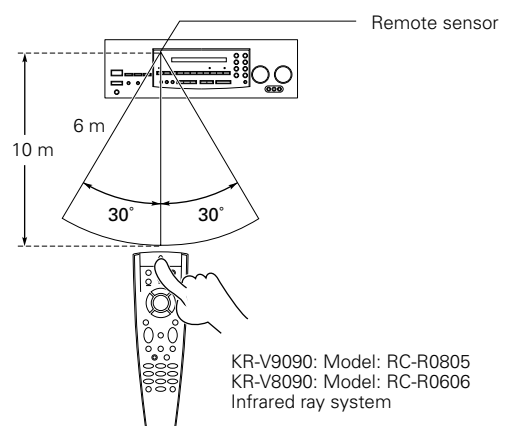


• Insert four AAA-size (LR03) batteries as indicated by the polarity markings.

- Notes**
- The supplied batteries may have shorter lives than ordinary batteries due to use during operation checks.
 - Replace all four batteries with new ones when you notice a shortening of the distance from which the remote control will operate or if the remote control blinks 5 times when you push a key. The remote control is designed to retain set up codes in memory while you change batteries. Failure to change batteries after receiving the 5 blink battery warning signal may cause all the memory to be lost (KR-V8090 only).
 - Placing the remote sensor in direct sunlight, or in direct light from a high frequency fluorescent lamp may cause a malfunction. In such a case, change the location of the system installation to prevent malfunction.

Operating distance

This remote control has two IR emitters: one to send commands in a straight line over long distances, allowing you to control the receiver and your other components from farther away; and one for wide dispersion of commands in a closer proximity, for near-field operation even when the remote control is not pointed directly at the respective component.



KR-V9090: Model: RC-R0805
 KR-V8090: Model: RC-R0606
 Infrared ray system

Preparing for surround sound

KR-V9090/8090 (En/T)

To enhance the surround modes, various parameters can be set up to accommodate the speaker system used and the environment of the listening room. The following procedure lets you set the parameters of the surround modes (DOLBY PRO LOGIC, DOLBY 3 STEREO and DSP).

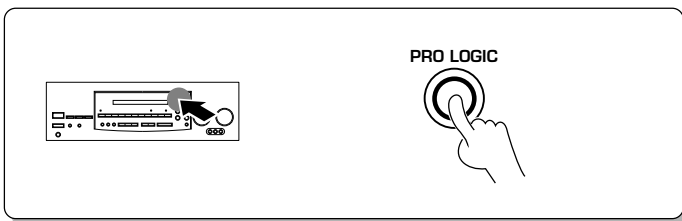
Once the settings have been done, it is held in memory so readjustment is not necessary even after the mode has been changed.

Recommended speaker installation

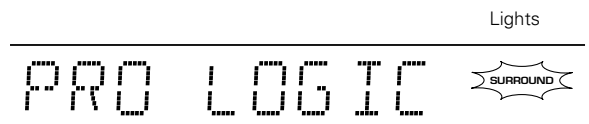
It is recommended that the surround speakers are installed straight to the left and right of the listening position or slightly behind, at a height of about 1 meter higher than the listener's ears. Each surround speaker should be installed so that the longer sides are horizontal.

Surround setup

1 Select the Dolby Pro Logic surround mode.

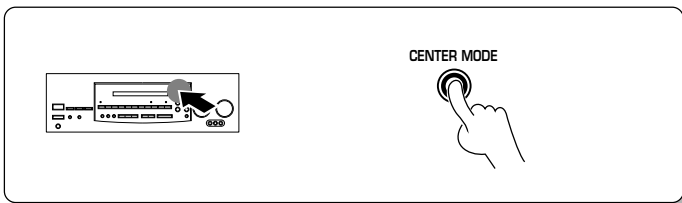


- The following adjustments (center mode, test tone, etc.) are common for all surround modes, including DSP. You do not need to make separate adjustments for each sound mode.



When DOLBY PRO LOGIC is selected

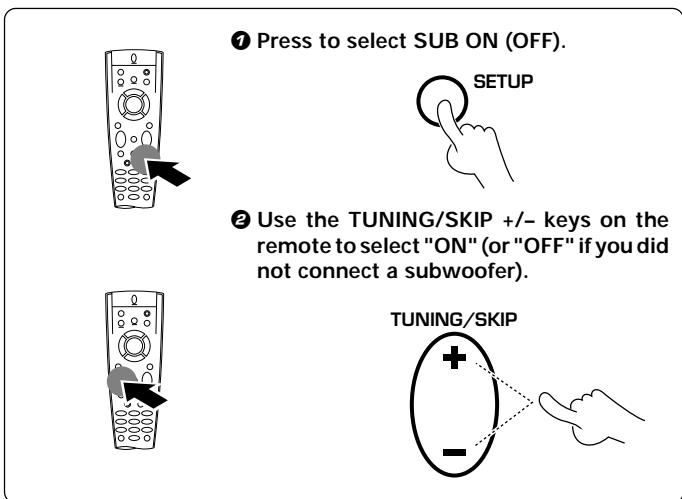
2 Select the CENTER MODE.



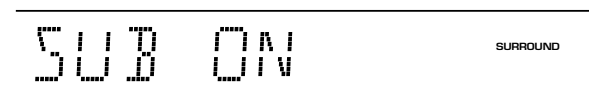
When you select PRO LOGIC, each press of the **CENTER MODE** key switches the center mode as follows:

- ① "NORMAL" :When using a standard (small) center speaker.
- ② "WIDE BAND" :When using a full range (large) center speaker.
- ③ "PHANTOM" :When not using a center speaker.

3 Turn on the SUBWOOFER.



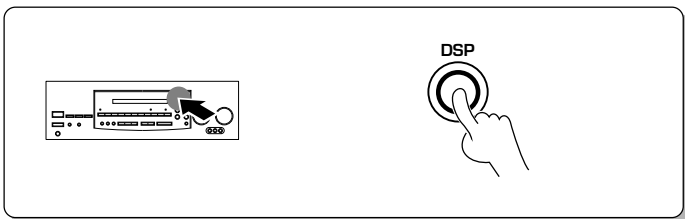
- If you did not connect a subwoofer, select "SUB OFF".



Display when the subwoofer setting is selected

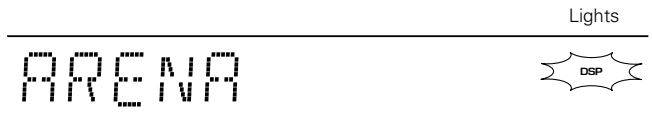
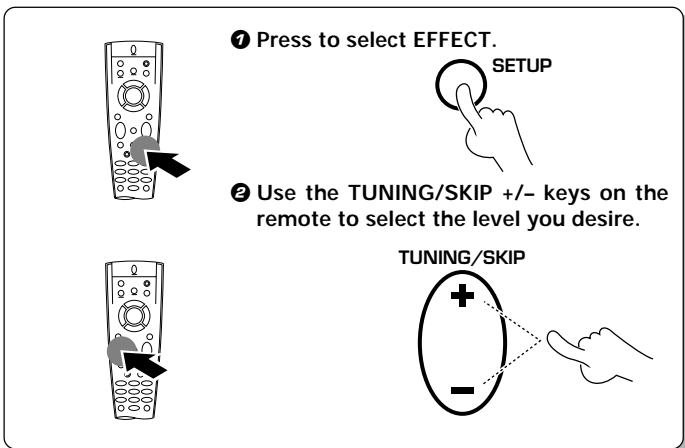
DSP mode setup

1 Select a DSP mode.

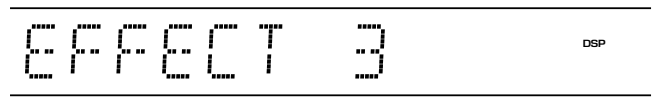


- The following adjustments (effect level, wall type, and room size) are common for all DSP modes. If necessary these modes can be adjusted again according to your preference after listening to the surround effect they produce.
- The subwoofer, center mode and test tone adjustments made in the PRO LOGIC mode are automatically applied to the DSP modes. → [14]

2 Adjust the EFFECT level.



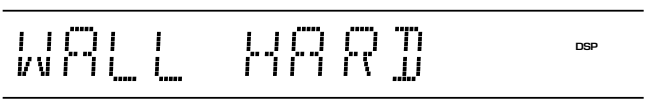
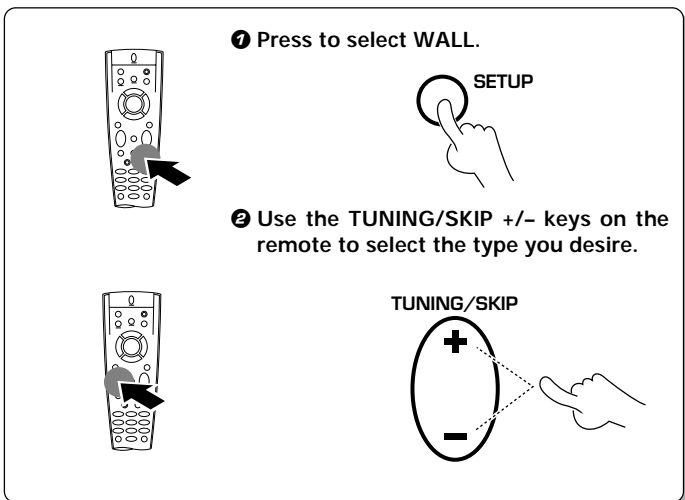
When the "ARENA" DSP mode is selected



Display when the EFFECT level setting is selected

- The EFFECT level is adjustable in 5 steps, 1 ↔ 5 (larger number represent a stronger effect).

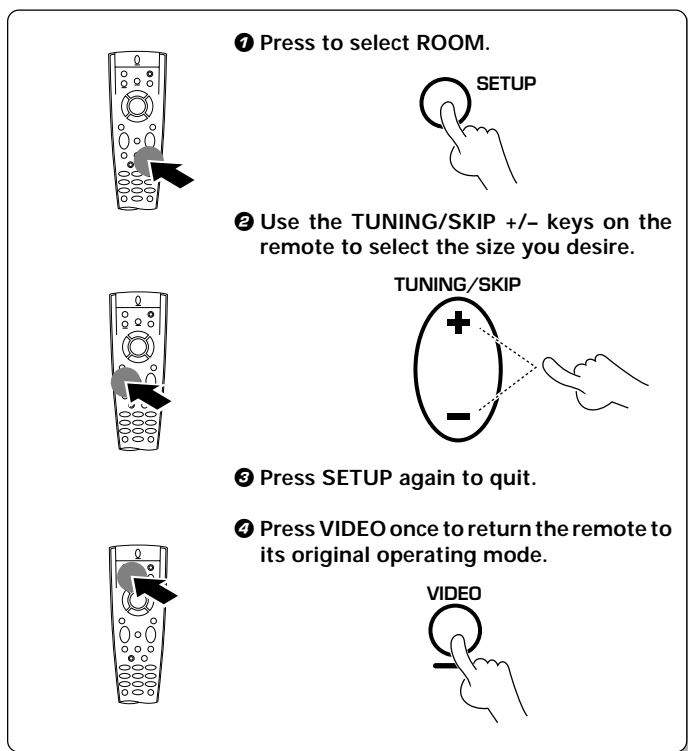
3 Adjust the WALL type.



Display when the WALL type setting is selected

- The WALL type is adjustable in 3 steps, "HARD" (hard), "MED" (medium) and "SOFT" (soft).

4 Adjust the ROOM size.

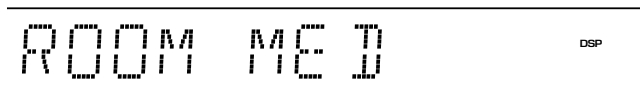


1 Press to select ROOM.

2 Use the TUNING/SKIP +/- keys on the remote to select the size you desire.

3 Press SETUP again to quit.

4 Press VIDEO once to return the remote to its original operating mode.



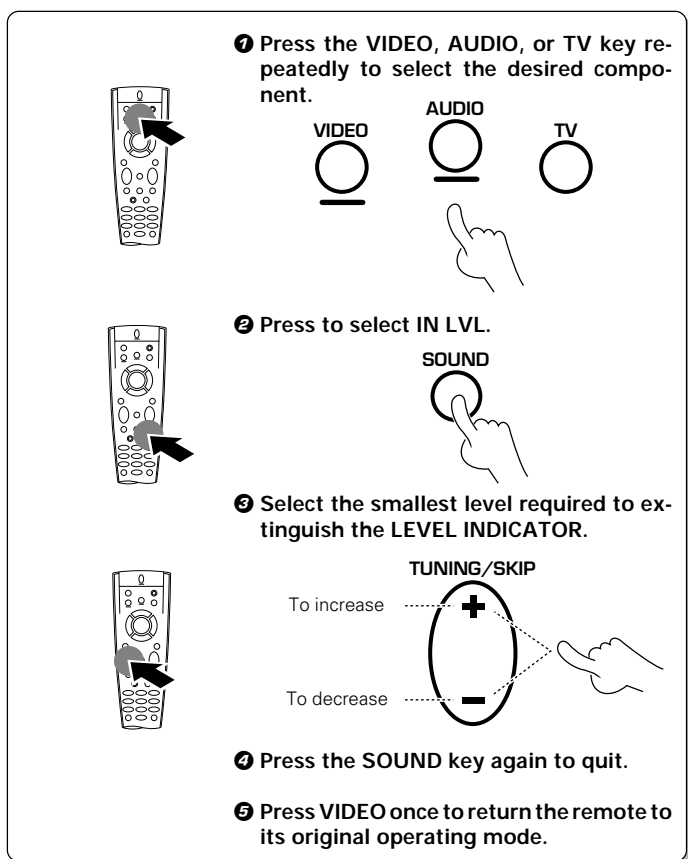
Display when the ROOM size setting is selected

- The ROOM size is adjustable in 3 steps, "SML" (small), "MED" (medium) and "LRG" (large).

- The input selector does not change the first time you press the VIDEO key.

Input level adjustment

The LEVEL INDICATOR lights during playback if the signal from an analog source is too large. If this occurs, use this function to attenuate the level for that source.



1 Press the VIDEO, AUDIO, or TV key repeatedly to select the desired component.

2 Press to select IN LVL.

3 Select the smallest level required to extinguish the LEVEL INDICATOR.

4 Press the SOUND key again to quit.

5 Press VIDEO once to return the remote to its original operating mode.

- Input level adjustment is not possible when using the AUX.6CH INPUT or ADAPTOR jacks.

The display changes as shown below:

- 1 "BASS"
- 2 "TREBLE"
- 3 "IN LVL"



Display when IN LVL is selected

- The input level is adjustable in 3 steps, 0 dB ↔ -3 dB ↔ -6 dB (normally set to 0 dB).
- The bass and treble settings can also be adjusted using this procedure.

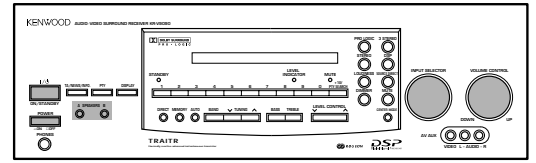
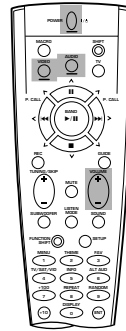
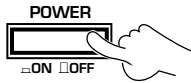
- The input selector does not change the first time you press the VIDEO key.

Normal playback

KR-V9090/8090 (En/T)

1 8

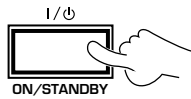
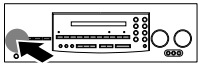
- Preparations**
- Turn on the power to the related components.
 - Set the **POWER** key to the ON position.



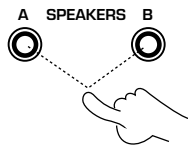
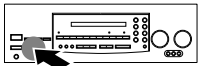
Keys or controls used in this operation.

Listening to a source component

- 1** Turn on the receiver.

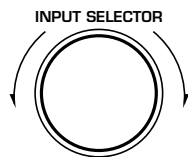


- 2** Select a speaker system.



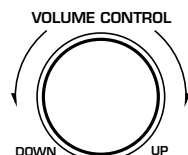
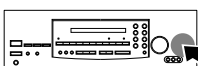
The indicator for the speakers you want to use should be lit.

- 3** Select the source you desire.



- 4** Start playback from the selected source.

- 5** Adjust the volume.



Decrease volume DOWN UP Increase volume

- A ON** : Sound from the speakers connected to the SPEAKERS A terminals on the rear panel.
- B ON** : Sound from the speakers connected to the SPEAKERS B terminals on the rear panel.
- A+B ON** : Sound from both the speakers connected to the SPEAKERS A and B terminals on the rear panel.
- A+B OFF** : No sound from the speakers. Use this setting when listening with headphones for stereo sound in all playback modes.

- When both SPEAKERS A and B are ON, activating a surround mode turns SPEAKERS B OFF automatically.

The input sources change as shown below:

- ① TUNER (Frequency display)
- ② "PHONO" ("PHONO"*)
- ③ "VIDEO1" ("SAT"*)
- ④ "VIDEO2" ("LD"*)
- ⑤ "VIDEO3" ("VCR"*)
- ⑥ "AV AUX"
- ⑦ "CD" ("CD"*)
- ⑧ "TAPE/MD" ("TAPE"*)

* Once setup codes are registered in the remote control, the input name display changes according to the name of the registered component. Example: if you register a VCR at the VIDEO 1 jacks, "VCR1" appears instead of "VIDEO 1". → 35

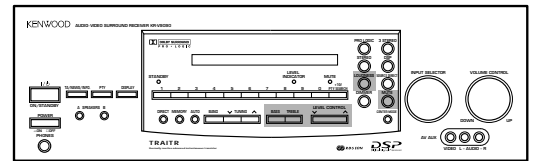
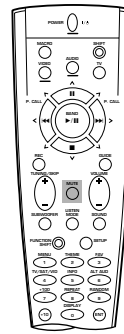
- When using the remote control after initial setup, any inputs that have not been registered with a setup code are deleted from the cyclic list (except for the "AV AUX" VIDEO input). → 37
- The **INPUT SELECTOR** on the front panel of the receiver always cycles through all inputs.

Volume display



To adjust the balance

Use the test tone feature.

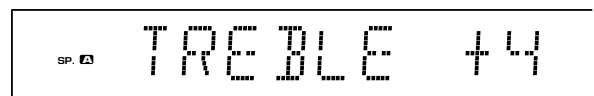


Keys or controls used in this operation.

Adjusting the sound

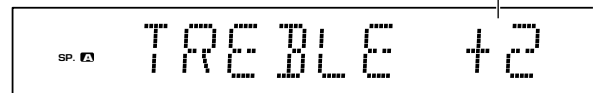
Adjusting the tone

- 1 Press the **BASS** or **TREBLE** key to select the tone mode to be adjusted.
- 2 Adjust the tone.
- 3 Press again to quit.



Display when "TREBLE" is selected.

The displayed value changes.



- The bass and treble levels are adjustable from -10 to +10 in 2 step increments.
- These adjustments can also be made by using the **SOUND** and **TUNING/SKIP** keys on the remote control.

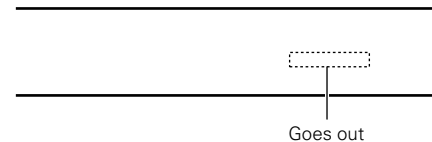
Emphasizing deep bass (LOUDNESS)

LOUDNESS lets you emphasize the sound of frequencies that are difficult to hear. The frequency emphasis varies according to the volume at which you are listening.

Press again to return to previous sound.



To cancel
Press again.

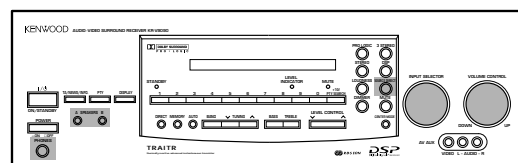
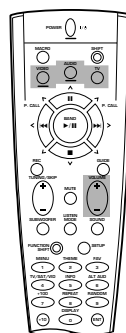


Muting the sound

MUTE lets you mute the sound of the speakers.

- The **MUTE** indicator on the front panel blinks when muting is turned on.

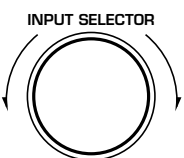

To cancel
Press again.

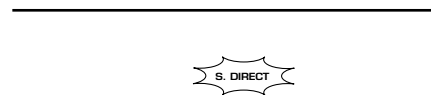


Keys or controls used in this operation.

SOURCE DIRECT playback

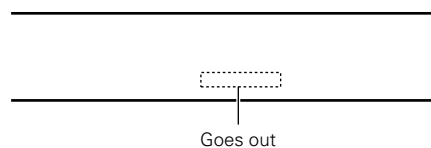
Use this function to pass the source material direct to the amplifier, bypassing any audio processing.

- 1 Select a playback source.
 
- 2 Press the SOURCE DIRECT key.
 
- 3 Start playback .



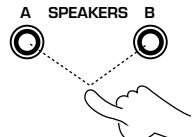

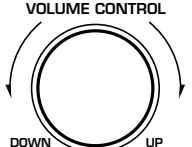
- Tone controls do not work during SOURCE DIRECT playback.
- Pressing the **STEREO** key or any of the keys related to surround playback will cancel SOURCE DIRECT playback.

To cancel
Press again.

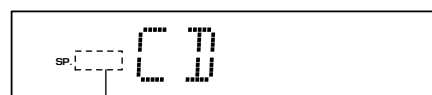


- If SOURCE DIRECT playback was activated when using a surround mode, cancelling it reactivates the previous surround mode.

Listening with headphones

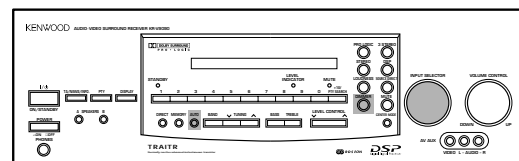
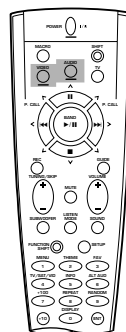
- 1 Turn OFF both speaker switches.
 
- 2 Connect headphones.
 
- 3 Adjust the volume.
 

Decrease volume Increase volume



Make sure the SPEAKERS indicators are turned off.

- Turning off both **SPEAKERS A** and **B** when using a surround mode will cancel the respective mode and activate stereo playback.




Keys or controls used in this operation.

6CH.INPUT playback (KR-V9090 only)


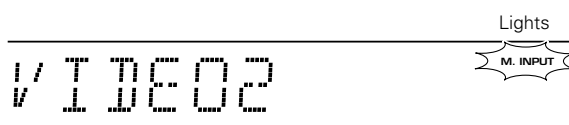
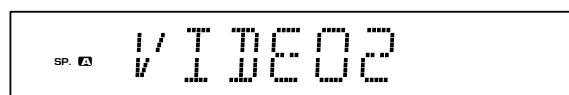
This function allows you to pair the video signal input to the VIDEO 2 VIDEO jack with audio signals input to the 6CH.INPUT jacks.



1 Set the INPUT SELECTOR to VIDEO 2.




2 Hold down the AUTO key for more than 2 seconds.

- When the receiver is set to this mode, it functions as a multi-channel amplifier (the surround effects (etc.) cannot be activated).
- The sound of the front channel is output from the SPEAKERS A only.
- The receiver switches to the multi-channel amplification mode automatically whenever VIDEO 2 is selected.
- To undo this setting and listen to the audio signals input to the VIDEO 2 AUDIO jacks, repeat this procedure so that "M.INPUT" goes out.

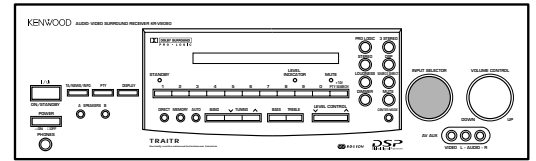
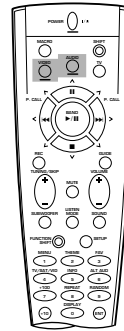
Listening with a graphic equalizer

Hold down the DIMMER key for more than 2 seconds.




Appears for a few seconds after the adaptor input is turned on.

- When the receiver is set to this mode, the audio signals are looped through the graphic equalizer connected to the ADAPTOR OUT and IN jacks on the rear panel.
- When the adaptor is on, the overall volume is slightly decreased.
- To undo this setting, repeat this procedure to display "ADPT OFF".

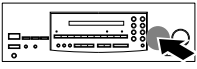


Keys or controls used in this operation.

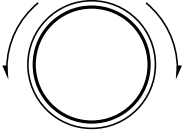
Recording audio

Recording a music source

1 Select the source you want to record.



INPUT SELECTOR



Select a source other than TAPE

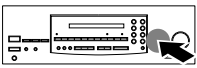
2 Set the cassette deck to record.

3 Start playback, then start recording.

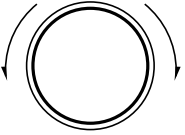
Operations

Recording video

1 Select the source you want to record.



INPUT SELECTOR



Select a source other than VIDEO 1

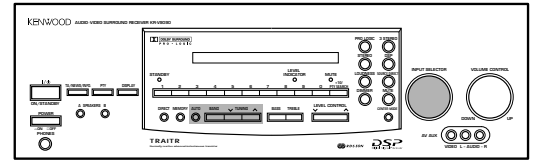
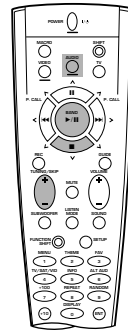
2 Set the video deck to record.

3 Start playback, then start recording.

- The AV AUX jacks on the front panel provide a convenient way to connect a video camera (playback only).

Listening to radio broadcasts

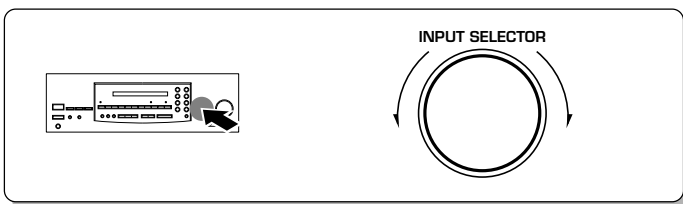
Radio stations can be classified into RDS (Radio Data System) stations and other stations. To listen to or store RDS stations in the preset memory, see the section entitled, "Using RDS".



Keys or controls used in this operation.

Tuning (non-RDS) radio stations

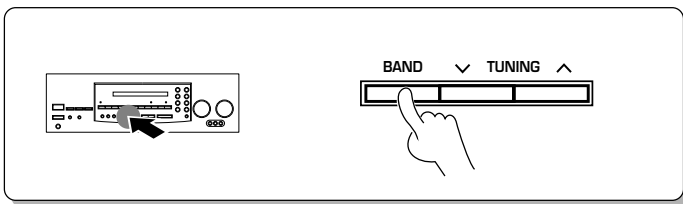
1 Set the input to tuner.



Frequency display

89.00 FM
MHz

2 Select a broadcast band.



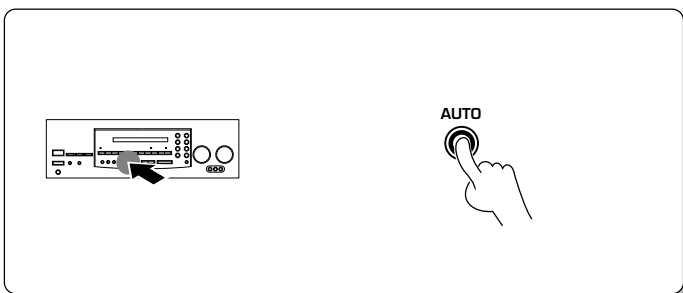
Each press switches the band as follows:

- ① FM
- ② AM

"AM" or "FM" indicator

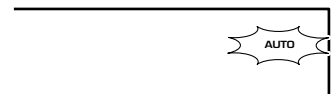


3 Select a tuning method.



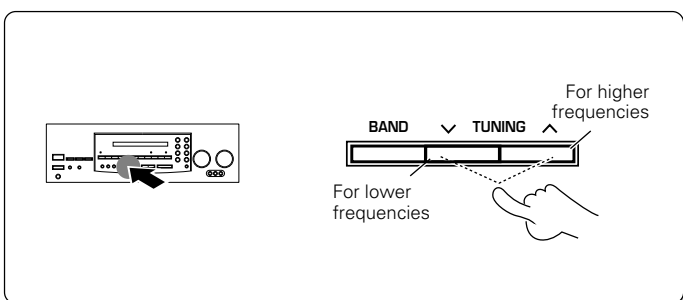
Each press switches the tuning method as follows:

- ① AUTO lit (auto tuning)
- ② AUTO not lit (manual tuning)



- Normally, set to "AUTO" (auto tuning).
- If the radio waves are weak and there is a lot of interference, switch to manual tuning. (With manual tuning, stereo broadcasts will be received in monaural.)

4 Select a station.

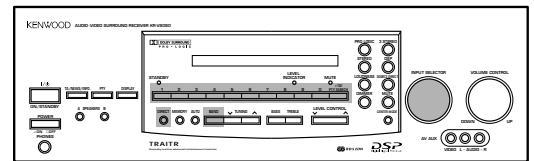
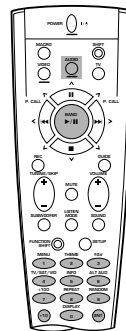


Frequency display

89.00 FM
MHz

"TUNED" is displayed when a station is received

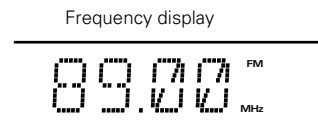
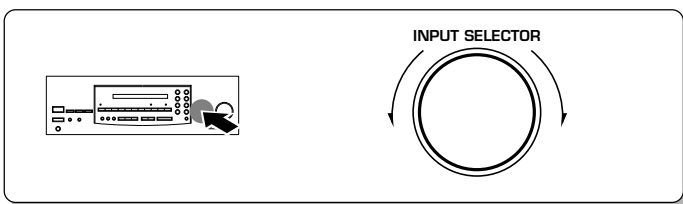
- Auto tuning : The next station is tuned automatically.
- Manual tuning : Press repeatedly or hold to tune the station.



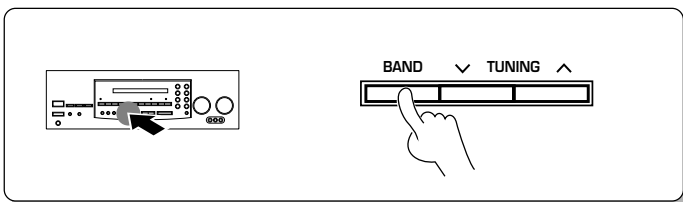
Keys or controls used in this operation.

Tuning radio stations by frequency (DIRECT tuning)

1 Set the input to tuner.



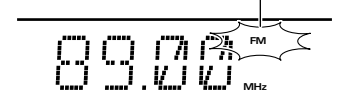
2 Select a broadcast band.



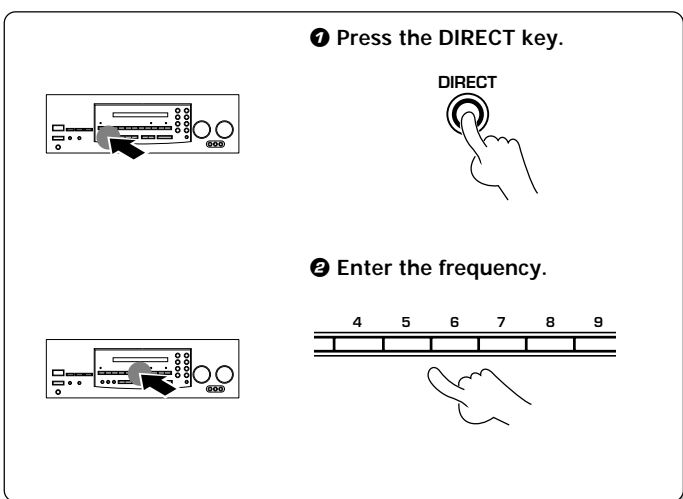
Each press switches the band as follows:

- ① FM
- ② AM

"AM" or "FM" is displayed



3 Enter the frequency.



Press the numeric keys according to the frequency to be tuned as shown below:

- AM 810 kHz, press **8**, **1**, **0**
- AM 1260 kHz, press **1**, **2**, **6**, **0**
- FM 90 MHz, press **9**, **0**, **0**, **0**
- FM 102.5 MHz, press **1**, **0**, **2**, **5**, **0**



"TUNED" is displayed when a station is received

- If you make a mistake entering the frequency, the frequency display will blink for a few seconds. In this case, start again from step **2**.

Using RDS (Radio Data System)

RDS is a system that transmits useful information (in the form of digital data) for FM broadcasts along with the broadcast signal. Tuners and receivers designed for RDS reception can extract the information from the broadcast signal for use with various functions, such as automatic display of the station name.

RDS functions:

PTY (Program Type Identification) Search: → 28

Automatically tunes to a station that is currently broadcasting the specified program type (genre).

EON (Enhanced Other Network) reservation → 30

Sets the tuner to automatically switch to stations broadcasting one of three types of programs, even though you are listening to another station. The tuner returns to the original station when the broadcast of the selected program ends.

PS (Program Service Name) Display: See figure ① below.

Automatically displays the station name transmitted by the RDS station.

RDS Auto Memory function → 26

Automatically selects and stores up to 40 RDS stations in the preset memory.

Radio text function: See figure ③ below.

Displays the radio text data transmitted by some RDS stations when you press the **DISPLAY** key. There is no display if no text data was transmitted.

The "RDS" indicator lights up when an RDS broadcast (signal) is received.



Some functions and function names may differ for certain countries and areas.

Before using a function utilizing the RDS, be sure to perform the RDS Auto Memory operation by referring to the description in "Presetting RDS stations (RDS AUTO MEMORY)". → 26

Using the DISPLAY key

Pressing the DISPLAY key changes the contents of the display.



Each press switches the display mode as follows:

- ① PS (Program Service name) display
- ② Frequency display
- ③ RT (Radio Text) display

① PS (Program Service name) display:

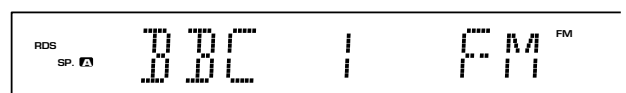
The station name is displayed automatically when an RDS broadcast is received. If no PS data was sent, "NO PS" is displayed.

② Frequency display:

Displays the frequency of the current station.

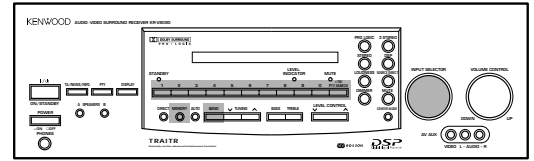
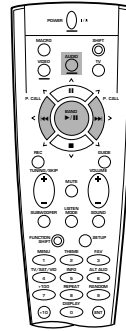
③ RT (Radio Text) display:

Text data accompanying the RDS broadcast scrolls across the display. "NO RT" is displayed if the current RDS station does not provide RT data.



Before listening to an RDS broadcast, follow the instructions below to store the RDS stations in the preset memory. Up to 40 stations can be preset, and then received with the touch of a single button.

This receiver uses the Radio Data System (RDS) to provide convenient tuning functions like PTY search and EON reservation.

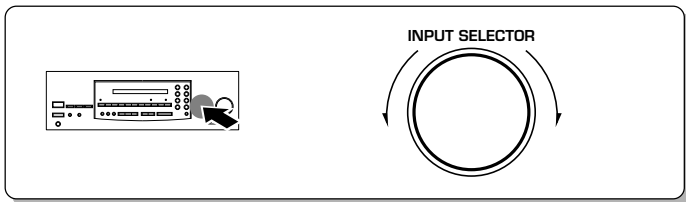


Keys or controls used in this operation.

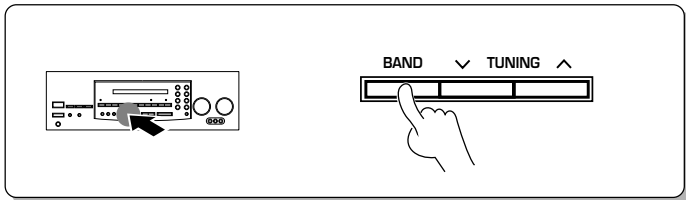
Presetting RDS stations (RDS AUTO MEMORY)

This function automatically stores up to 40 RDS stations in the preset memory. In order to use the EON and PTY functions, the RDS stations must be stored in the preset memory using the RDS AUTO MEMORY function.

1 Set the input to tuner.

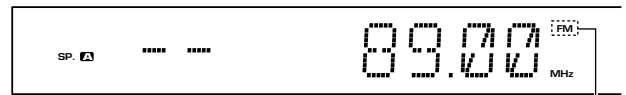


2 Set the broadcast band to "FM".



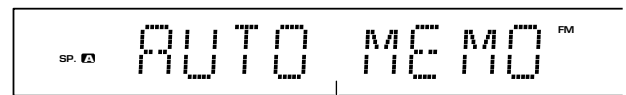
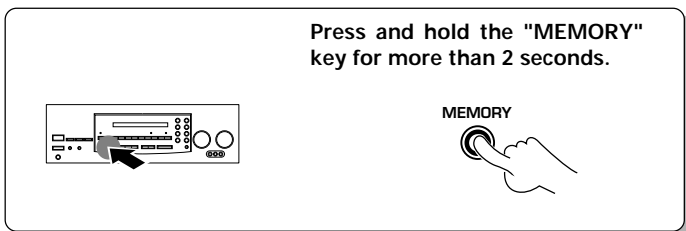
Each press switches the band as follows:

- ① FM
- ② AM



"FM" is displayed

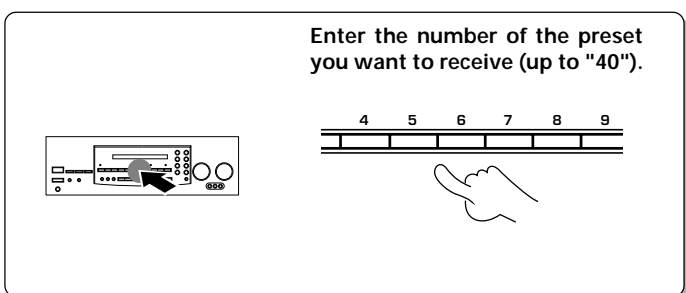
3 Store the stations automatically.



Blinks

- After a few minutes, up to 40 RDS stations are preset in order from channel "01".
- Stations already stored in the preset memory may be replaced by RDS stations. (i.e., If the RDS AUTO MEMORY function finds 15 RDS stations, the stations currently preset at numbers 01~15 are replaced by the RDS stations.)

Receiving preset RDS stations



Press the numeric keys in the following order:

For "15", press **+10**, **5**

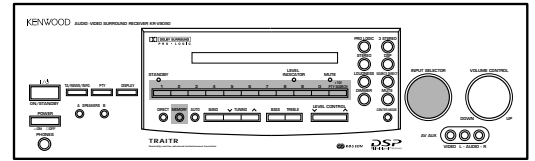
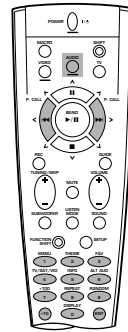
For "20", press **+10**, **+10**, **0**

- If you make a mistake entering a two digit number, press the **+10** key several times to return to the original display and start again.
- To change the information in the display, press the **DISPLAY** key.



The RDS auto memory function assigns preset numbers to RDS stations starting from preset number "1". Therefore, be sure to execute the RDS auto memory function before using the following operations to manually store AM stations and other FM stations, and RDS stations.

"Presetting RDS stations (RDS AUTO MEMORY)". → 26



Keys or controls used in this operation.

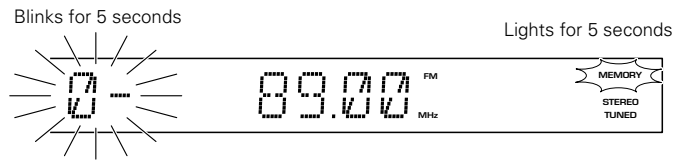
Preparation • Select tuner.

Presetting radio stations manually

- ➊ Tune to the station you want to store.
- ➋ Press the MEMORY key while receiving the station.
- ➌ Enter a preset number (1-40).

Proceed to step ➌ within 5 seconds. (If more than 5 seconds elapse, press MEMORY again).

- In addition to the RDS auto memory function, RDS stations can also be stored manually in the preset memory.
- When storing radio stations manually, it may take a few minutes before the "MEMORY" indicator appears in the display after pressing the MEMORY key depending on receiving conditions.



Press the numeric keys in the following order:

For "15", press **+10**, **5**
 For "20", press **+10**, **+10**, **0**

- Repeat steps ➊, ➋ and ➌ to store as many stations as necessary.
- If you store a station at a previously used preset, the old station will be replaced by the new one.
- When RDS stations are stored manually in the preset memory, the PS information may not be included in the memory depending on receiving conditions.

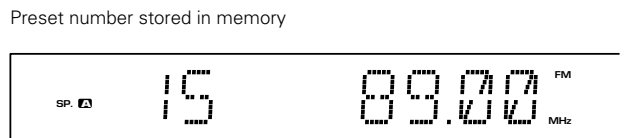
Receiving preset stations

- ➊ Select tuner.
- ➋ Enter the number of the preset you want to receive (up to "40").

Press the numeric keys in the following order:

For "15", press **+10**, **5**
 For "20", press **+10**, **+10**, **0**

- If you make a mistake entering a two digit number, press the **+10** key several times to return to the original display and start again.



Receiving preset stations in order (P.CALL)

When using the remote control, press AUDIO to select the tuner control mode.

Preset numbers ↑

P. CALL

Preset numbers ↓

- Each time you press the key, another preset station is received in order.

When you press **▶▶**
 1→2→3→ . . . 38→39→40→1→2→3→

When you press **◀◀**
 1←2←3← . . . 38←39←40←1←2←3←

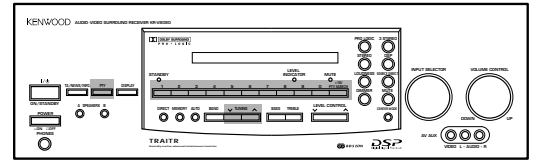
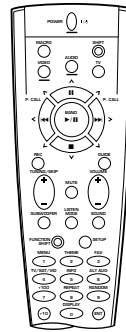
Holding down the button, lets you skip through the presets, receiving each for 0.5 seconds apiece.

28

This function lets you set the tuner to automatically search for stations which are currently broadcasting the type of program (genre) you want to listen to.

Under certain receiving conditions, it may take more than 1 minute to complete the search.

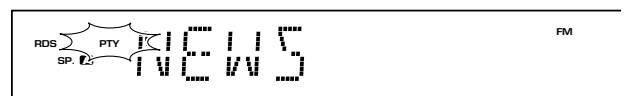
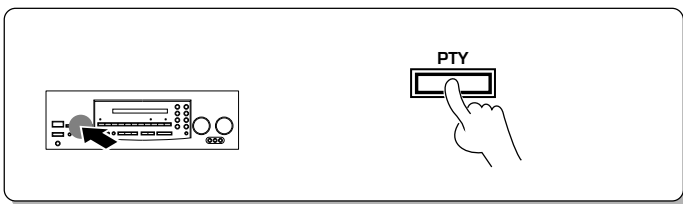
- Preparations**
- Execute the RDS auto memory procedure.
 - Set the broadcast band to FM.
 - Tune to an RDS station.



Keys or controls used in this operation.

Tuning by program type (PTY search)

1 Activate the PTY search mode.



When an RDS broadcast is received, the program type is shown on the display. If no PTY data is available, or if the station is not an RDS station, "NONE" is displayed.

2 Select the program type you desire.

Use the program type table on the right for your convenience.

(A) To select using the TUNING keys

Next program type
BAND TUNING
Previous program type

Select while "PTY" is lit.

The TUNING keys let you select from all 29 program types in the order shown at right.

(B) To select with the numeric keys

4 5 6 7 8 9

The numeric keys allow you to select programme types 1 to 0 directly. If you want to select one of the other programme types, use the TUNING key.

Program type table

| (A) | (B) | Program Type Name | Display | |
|-----------------------------------|-----|-----------------------|-----------------------|----------|
| (V) DOWN ↑ UP (^) | 1 | Pop Music | POP M | |
| | 2 | Rock Music | ROCK M | |
| | 3 | * M.O.R. Music | M.O.R. M | |
| | 4 | Light Classic Music | LIGHT M | |
| | 5 | Serious Classic Music | CLASSICS | |
| | 6 | Other Music | OTHER M | |
| | 7 | News | NEWS | |
| | 8 | Current Affairs | AFFAIRS | |
| | 9 | Information | INFO | |
| | 0 | Sport | SPORT | |
| | | | Education | EDUCATE |
| | | | Drama | DRAMA |
| | | | Cultures | CULTURE |
| | | | Science | SCIENCE |
| | | | Varied Speech | VARIED |
| | | | Weather | WEATHER |
| | | | Finance | FINANCE |
| | | | Children's programmes | CHILDREN |
| | | | Social affairs | SOCIAL A |
| | | | Religion | RELIGION |
| | | | Phone in | PHONE IN |
| | | | Travel | TRAVEL |
| | | | Leisure | LEISURE |
| | | | Jazz music | JAZZ |
| | | | Country Music | COUNTRY |
| | | | National Music | NATION M |
| | | | Oldies Music | OLDIES |
| | | | Folk Music | FOLK M |
| | | | Documentary | DOCUMENT |

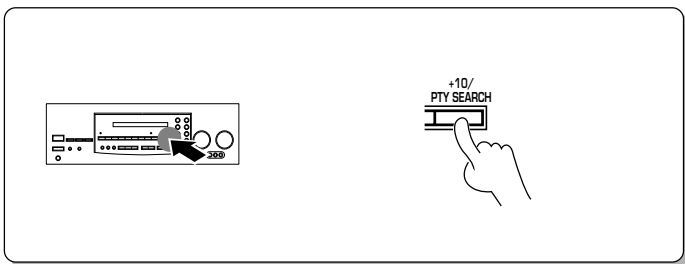
*M.O.R. Music (Middle of the Road Music)

• The operations shown in (A) can also be performed with the P.CALL keys on the remote control.

Operations

"NO DATA" is displayed if this operation is attempted before performing the RDS Auto Memory operation.

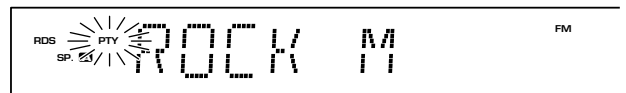
3 Start the search.



EXAMPLE: Searching for a Rock Music broadcast.

Display while searching

Blinks



Program type name display

Display when a station is received.

Goes out



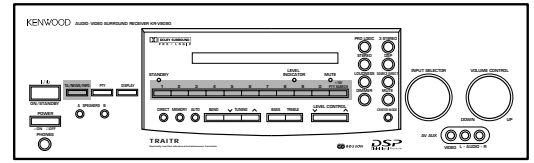
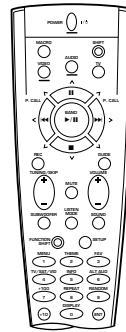
Station name display

To select another program type
Repeat steps 1, 2 and 3

- No sound is heard while "PTY" is blinking.
- If the desired program type cannot be found, "NO PROG" is displayed, then after several seconds the display returns to the original display.
- If the desired program type is found, that program is received. The program type display changes temporarily to the frequency display, and then to the station name display.

3 0 When the receiver is tuned to an RDS EON station (a station at which the EON indicator lights up), this function lets you set the receiver to automatically switch stations to receive news, traffic, or information programs as they are broadcast. When the broadcast is over, the receiver returns to the original station automatically.

Preparation • Set the broadcast band to FM.

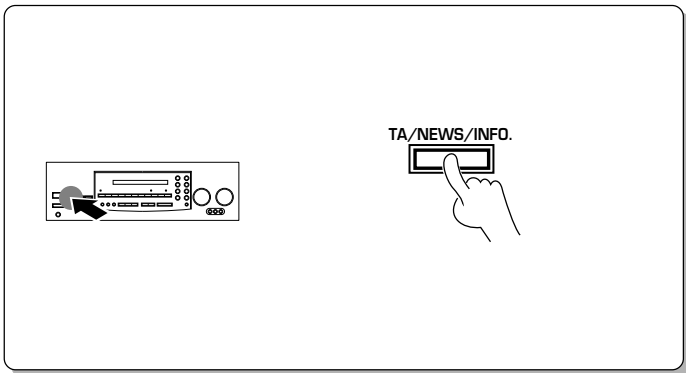


Keys or controls used in this operation.

Reserving the desired information

1 Complete steps **1**~**3** of "Presetting RDS stations (RDS AUTO MEMORY)". → 26

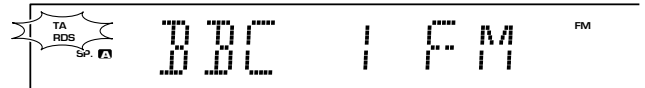
2 Select the information you desire.



Note Skip this step if you have already completed the RDS AUTO MEMORY procedure.

- The EON function will not work if all 40 FM preset stations were stored manually using the procedure shown in "Presetting radio stations manually". Be sure to use the RDS automatic memory function.

Display When "TA" is selected



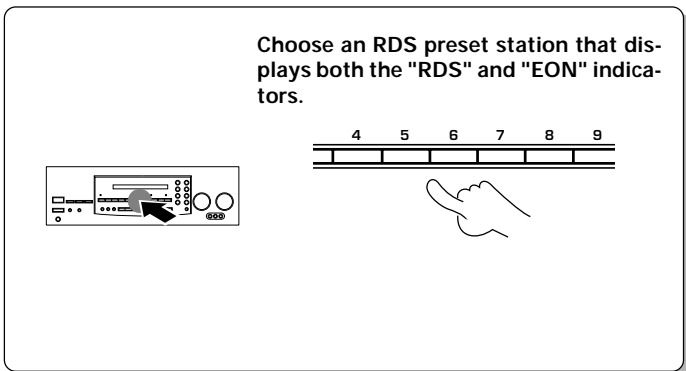
"TP" lights for stations where TP (Traffic Program) information can be received.

Each press switches the reservation mode as follows:

- ① **TA** (Traffic Announcement)
- ② **NEWS** (News)
- ③ **INFO.** (Information)
- ④ off (**EON** off)

- If "TA", "NEWS" and "INFO" can not be selected, carry out the RDS automatic memory function again. → 26

3 Tune to a preset RDS station.

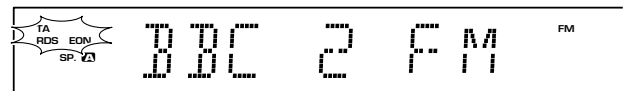


Press the numeric keys in the following order:

- For "15", press **+10**, **5**
- For "20", press **+10**, **+10**, **0**

- If you make a mistake entering a two digit number, press the **+10** key several times to return to the original display and start again.

Display When "TA" is selected



Be sure "EON" appears in the display

- If you want to reserve **TA**, receive a station with which the **TP** indicator lights.
- When "**EON**" does not light although an RDS station is received, that station is not transmitting EON data. Please select a different station.

4 Wait for the information you selected while listening to the current station.

The receiver will wait for the desired information to start as long as the tuner is set to a preset RDS station that displays both the "EON" and "RDS" indicators, and the power is turned ON.

When listening to the tuner:

Be sure to stay tuned to stations that display both the "EON" and "RDS" indicators.

To listen sources other than the tuner:

- ① Tune in a station which that displays both the "EON" and "RDS" indicators, then use the **INPUT SELECTOR** to switch the input to the source you desire.
- ② Even when the **INPUT SELECTOR** is set to a source other than tuner, it will automatically switch to tuner when the desired EON program starts to broadcast. During this period, the source selected in step ① continues playing, but will not be heard.
- ③ When reception of the desired EON program is complete, the **INPUT SELECTOR** returns to the previous input source.

- When the power is OFF, the EON function does not operate.
- If a reserved EON program starts to broadcast during analog recording, the **INPUT SELECTOR** switches to the tuner and the station broadcasting the EON program is recorded.

When waiting for information while listening to a RDS station without the EON function

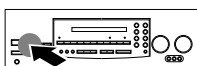
If the "EON" indicator does not light in steps 3 and 4 and the desired kind of information has already been selected, the information from only the station being received will be waited for.

TP (Traffic Program) indication

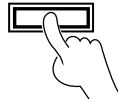
When the "TP" indicator is lit, this means that the presently-received station or a station in the same network is transmitting traffic information. When "TP" is displayed for the station being received, the traffic information of this station can be received without EON reservation.

To cancel EON reservation

Turn the "TA", "NEWS" and "INFO." indicators off.



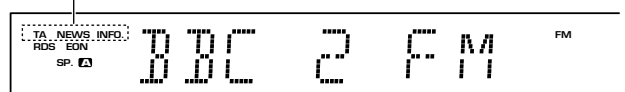
TA/NEWS/INFO.



Each press switches the reservation mode as follows:

- ① **TA** (Traffic Announcement)
- ② **NEWS** (News)
- ③ **INFO.** (Information)
- ④ off (**EON** off)

Should be off

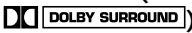


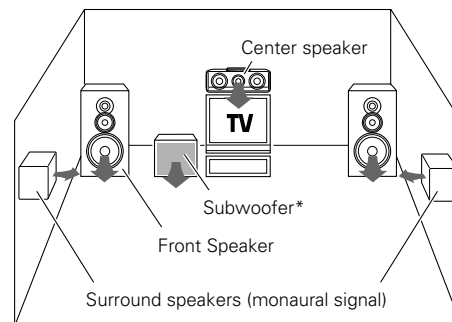
This receiver incorporates 3 different sound modes to let you enjoy surround sound with a wide variety of program sources. The Dolby Pro Logic surround sound let you enjoy theater-like surround effects when you play Dolby Pro Logic program sources (like Laserdiscs). Dolby 3 Stereo creates a panoramic frontal sound field while keeping dialog on screen. The Digital Signal Processing (DSP) modes let you create a variety of different sonic environments from almost any type of program source.

To obtain the best possible surround sound, be sure to complete "Preparing for surround sound" before using the surround modes. → 14

Sound modes

Dolby Pro Logic

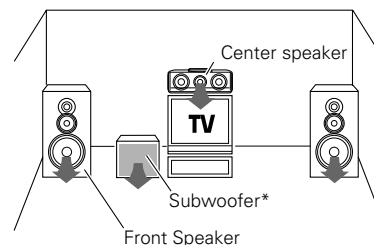
Dolby Pro Logic is a specially encoded 2 channel surround format designed to provide theater-like surround sound from Dolby Pro Logic program sources (such as video and Laserdisc software marked ). This receiver is equipped with a Dolby Pro Logic surround decoder to let you enjoy the wide variety of currently available Dolby Pro Logic home video software.



* Optional in this mode.

Dolby 3 Stereo

Dolby 3 Stereo creates a panoramic frontal sound field while maintaining the dialog in an on-screen position. This mode is designed for use with Dolby program sources, but can also improve sound field unity for non-Dolby program sources. Dialog positioning and sound image definition, however, may not be as accurate when used with non-Dolby program sources.



* Optional in this mode.

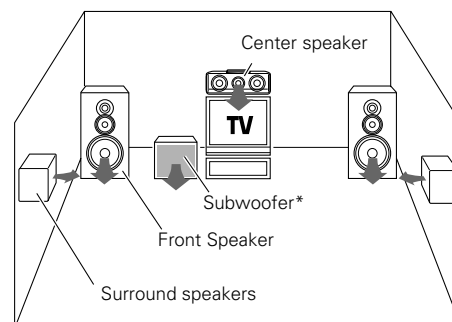
DSP mode

The DSP mode lets you add the atmosphere of an arena, jazz club, or stadium to almost any type of program source.* These modes are particularly effective when used with stereo program sources, like CD, television, and FM radio. You might enjoy trying the STADIUM or ARENA mode the next time you watch a concert or sporting event!

The WALL parameter lets you adjust the "brightness" of the sonic environment according to your preference. → 16

The ROOM SIZE parameter lets you adjust the size of the sonic environment according to your preference. → 17

The EFFECT level lets you adjust the "presence" of the sonic environment according to your preference. → 16



* Optional in this mode.


* The DSP mode will produce a stereo-like surround effect from monaural sources, but there will be some reduction in the presence of the arena, jazz club, or stadium.

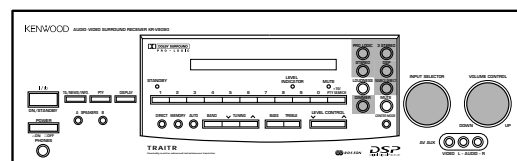
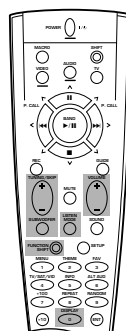
What's DSP?

DSP stands for Digital Signal Processor.

The way a sound is heard in an actual environment depends on a variety of different factors. One of the most important is reverberation (the act of decaying elements of sound echoing in various places).

The DSP modes produce the feeling of presence by using the DSP to create reverberation, without spoiling the sound quality of the original signal.

DOLBY PRO LOGIC and DOLBY 3 STEREO can be used when playing video or LD software bearing the  DOLBY SURROUND mark. DSP modes can be used with any source. Be sure to complete "Preparing for surround sound" before using any of these surround modes. → 14



: Keys or controls to be used in this operation

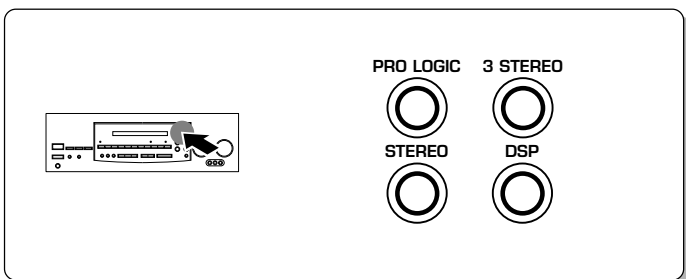
Preparations

- Turn ON related components.
- Complete "Preparing for surround sound". → 14
- Set the **INPUT SELECTOR** to the component you wish to play back with surround sound.

Surround play

1 Select a surround mode.

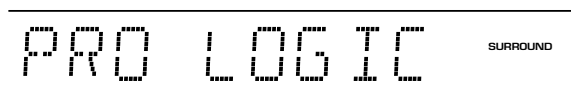
The surround mode settings are stored separately for each input.



- STEREO** : Cancels surround playback.
- PRO LOGIC** : Selects the DOLBY PRO LOGIC mode.
- 3-STEREO** : Selects the DOLBY 3 STEREO mode.
- DSP** : Selects the DSP mode. Each press changes the DSP mode as follows:
 - "ARENA" : Simulates the presence of an indoor concert arena.
 - "JAZZ CLUB" : Simulates the presence of a jazz club.
 - "STADIUM" : Simulates the presence of an outdoor stadium.

2 Start playing the video software.

3 Adjust the volume.



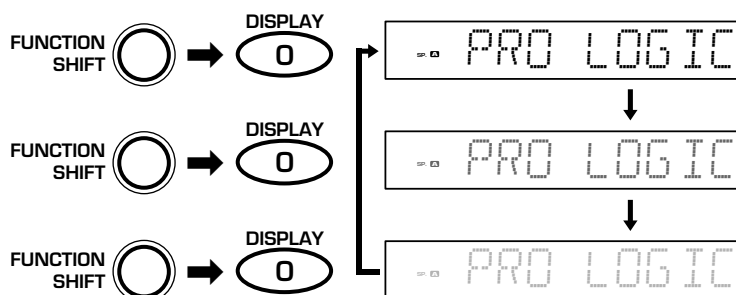
Example when DOLBY PRO LOGIC is selected

Convenient functions

Display dimmer adjustent

The **DIMMER** key on the front panel lets you select the brightness of the receiver's display. You might find this useful if you darken your room to watch movies or listen to music.

When the remote control is set to operate a video component, the **FUNCTION SHIFT** and **DISPLAY** key combination can be used to change the display on the respective video component. → 58



continued on next page

SOURCE DIRECT key

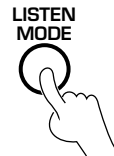
Lets you pass the source material direct to the amplifier, bypassing any audio processing. When SOURCE DIRECT is ON, surround sound is turned off and the tone controls are bypassed.

Press to switch.



LISTEN MODE key

The LISTEN MODE key on the remote control lets you switch the sound mode directly from the remote control.

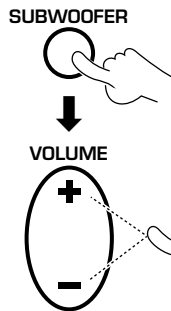


Press to switch.

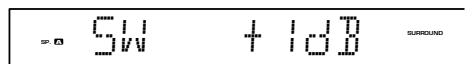
- ① STEREO
- ② PRO LOGIC
- ③ 3 STEREO
- ④ ARENA
- ⑤ JAZZ CLUB
- ⑥ STADIUM

SUBWOOFER adjustment

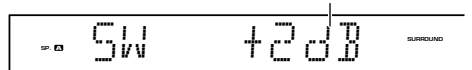
The SUBWOOFER key on the remote control lets you adjust the output level of the subwoofer while listening to a favorite source. First press the SUBWOOFER key to select the subwoofer operation mode, then use the VOLUME key to adjust the output level.



Display when SUBWOOFER is pressed.



The displayed value changes.



Getting the most from your remote control

KR-V9090/8090 (En/T)

The remote control supplied with this receiver is also capable of controlling components from a variety of manufacturers once you register the appropriate setup codes into the remote control unit.

Refer to "Remote operation of other components" for details about the operations available for each component. → 58

* When registering setup codes for KENWOOD audio components which are connected to this unit by system control cords, use the following codes to insure proper system control operation: Cassette: 7000, CD: 8099, MD: 9000. → 11

To control other KENWOOD components (VCRs, LD players, audio components not connected with system control cords, etc.) follow the procedure described below.

Low battery warning

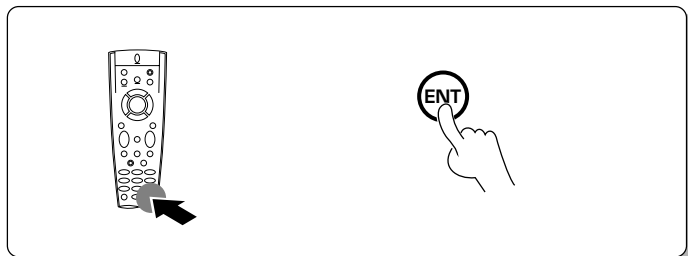
Replace all four batteries with new ones when you notice a shortening of the distance from which the remote control will operate or if the remote control blinks 5 times when you push a key. The remote control is designed to retain set up codes in memory while you change batteries. Failure to change batteries after receiving the 5 blink battery warning signal may cause all the memory to be lost (KR-V8090 only).

Registering setup codes for other components

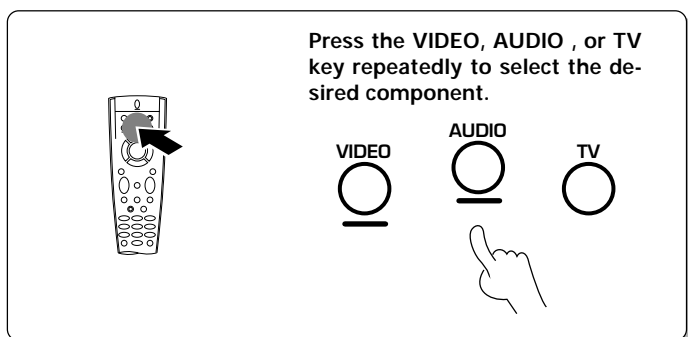
1 Find the setup code of the component to be registered.

- Refer to the setup code lists to find the setup code for the component to be registered. → 45
Example: To register a CD made by KENWOOD, you would enter "8037"
- If you purchase a new component that is not covered by the setup code list, you can use the FutureSet upgrade feature (KR-V9090 only). → 43

2 Hold down the ENT key until the backlight flashes twice and remains lit.



3 Select the component to be registered.



| Input | Component | Maker | Code | Key |
|---------|-----------|---------|------------|-------|
| (CD) | CD player | KENWOOD | 8028, 8037 | AUDIO |
| VIDEO 1 | | | | |
| VIDEO 2 | | | | |
| VIDEO 3 | | | | |
| TAPE/MD | | | | |
| CD | | | | |
| PHONO | | | | |
| — | TV 1 | | | |
| — | TV 2 | | | |
| — | CABLE | | | |
| | | | | |
| | | | | |
| | | | | |

- At this time all inputs become available regardless of any earlier registration.



Perform each of the following steps within 5 seconds.

VIDEO key

- 1 VIDEO1 (SAT)
- 2 VIDEO2 (LD)
- 3 VIDEO3 (VCR)

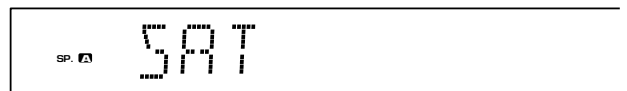
AUDIO key

- 1 CD (CD)
- 2 TAPE/MD (TAPE)
- 3 PHONO

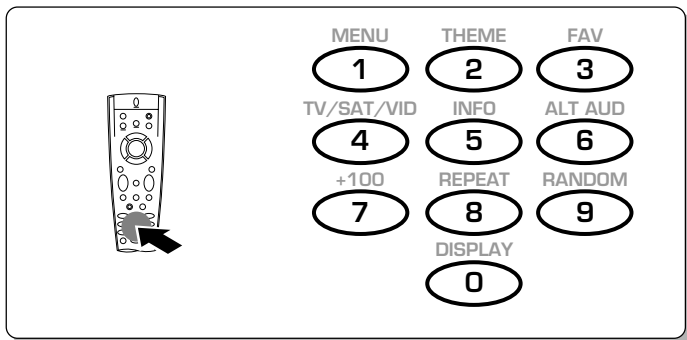
TV key

- 1 TV1
- 2 TV2
- 3 CABLE

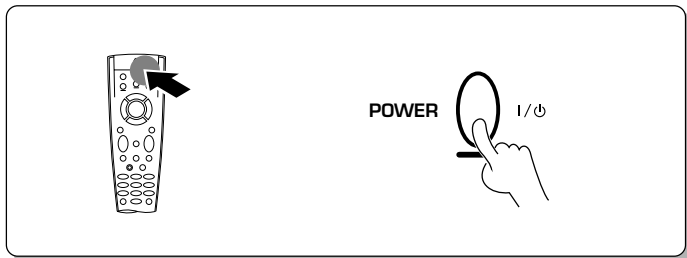
- Example : To register the component connected to the VIDEO 1 jacks, select "VIDEO 1 (SAT)".



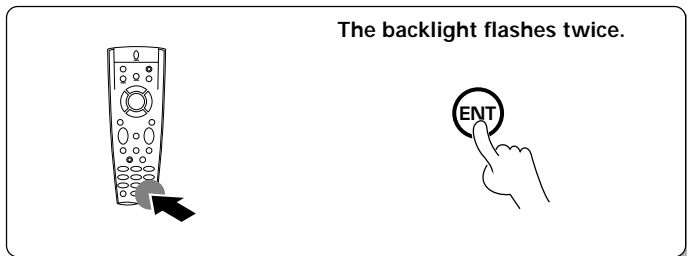
continued on next page

4 Enter the setup code.

- Example: Press 5258 to register a LD player made by KENWOOD.
- The backlight flashes once each time a number is entered.
- If an invalid setup code is entered the remote will output one long blink, disregard that code and return to the beginning of step 4.
- If you push an invalid key, the remote will exit the setup mode.

5 Press **POWER**, and check to see that the component you want to control turns on.

- **PLAY** or **TUNING/SKIP (+/-)** can also be used instead of **POWER**.
- If the component does not react, and there is more than one setup code, enter another setup code and try again.
- If the component is already on, pressing **POWER** will turn it off.

6 Press the **ENT** key to store the code you have just input.

- This code replaces any previous setup codes entered for the respective component.

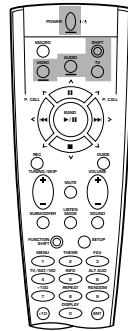
7 Repeat steps 3 to 6 to register additional components until all components have been registered.**8** Once setup codes have been entered for all components, hold down the **ENT** key until the backlight flashes twice.

- If you have components that are not remote controllable, like a record player (etc.), you will need to register a Non-IR code at the respective input. This keeps the respective input in the remote control's cyclic list so you can select it using the remote control. Please consult the owner's manual of the components you are connecting for information regarding remote controllability. The list of Non-IR codes is included at the beginning of the Set up code chart. → 45

- This operation should take about 3 seconds.
- Once registered, the display on the receiver shows the component type instead of the default input name.
Example: if you register a VCR at the VIDEO 1 jacks, "**VCR**" appears instead of "**VIDEO 1 (SAT)**".
- After initial setup, any VIDEO (VIDEO 1, 2, 3) or TV (TV1, TV2, CABLE) inputs that have not been programmed with a setup code or Non-IR code are deleted from the cyclic list (except for the "AV AUX" VIDEO input). The PHONO input will be deleted if a Non-IR code was not registered.
- The **INPUT SELECTOR** on the front panel of the receiver always cycles through all inputs.



Although each setup code is designed to work with a number of different models, certain codes may not work with some models. (Also, certain codes may only operate some of the functions available on a given model.)



Keys or controls used in this operation.

Operating other components

This operation lets you operate the registered components.

KENWOOD audio components with system control turn on and off automatically with the receiver via the system control connections. → 11

1 Use the VIDEO, AUDIO, or TV keys to select the component you desire.

2 Press the SHIFT key and then press the POWER key (within 3 seconds).

3 Press the operation keys you desire.

- Pressing the **VIDEO** or **AUDIO** key also changes the input selector on the receiver. If you do not want to change the current input, press the **SHIFT** key before step 1.

VIDEO key

- 1 VIDEO1 (VCR 1)
- 2 VIDEO2 (VCR 2)
- 3 VIDEO3 (LD)
- 4 AV AUX

AUDIO key

- 1 CD (CD)
- 2 TAPE/MD (TAPE)
- 3 TUNER
- 4 PHONO

TV key

- 1 TV1
- 2 TV2
- 3 CABLE

- Pressing the **SHIFT** key is only required when turning the selected component on or off. Pressing the **POWER** key directly turns the receiver on and off.

- See "Remote operation of other components" at the end of this manual for a list of keys available with each component. → 58

The remote control mode remains in the set at the component selected in step 1 mode until you select another component (etc.).



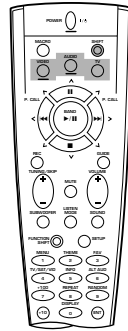
Be sure to point the remote control at the remote sensor on the receiver when you want to operate KENWOOD components connected by system control cords. Otherwise, point the remote control at the component you want to operate.

3 8

This operation lets you change the remote control operation mode without changing the input selector.

You may find this useful when you want to control one component while using another. (For example, if you want to rewind the tape deck while listening to a CD.)

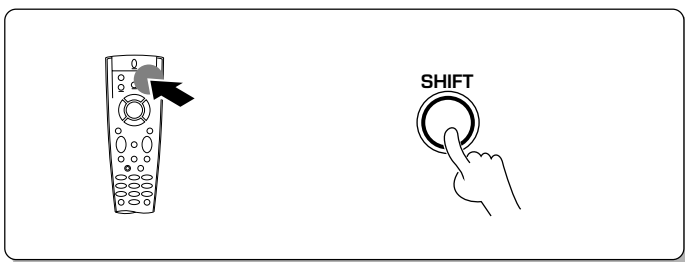
This operation is also useful if you don't know the which mode the remote control is set to. Executing this operation allows you to change or reconfirm the operation mode you desire.



Keys or controls used in this operation.

Changing (confirming) the operation mode

1 Press **SHIFT**.

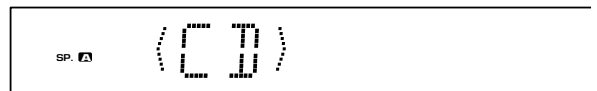
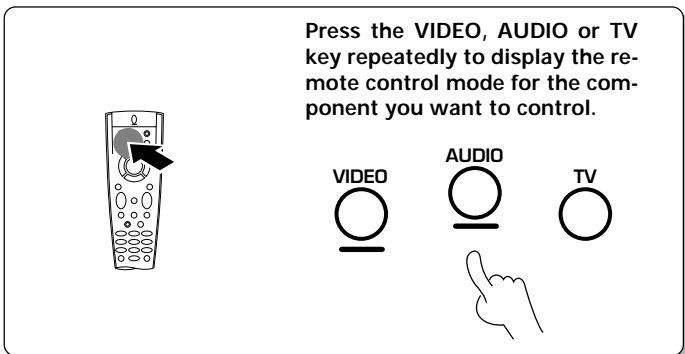


- To operate a TV, start from step 2.



Go to step 2 within 3 seconds.

2 Select the component to be controlled.



The component to be controlled is displayed in parenthesis

- Pressing any other keys after the **SHIFT** key cancels the shift function and sends the normal code associated with the respective key.
- The input selector does not change during this operation.
- If you press **VIDEO** or **AUDIO** key more than 3 seconds after pressing the **SHIFT** key, the input selector changes together with the operation mode.

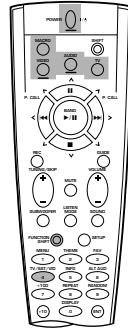
3 Execute the desired operations.

- See "Remote operation of other components" for a list of keys available with each component. → 58

The operation mode remains set at the component specified in step 2.

To return control to the original component, press **SHIFT** and then press the **VIDEO** or **AUDIO** key to return to the original control mode.

The macro play function allows you to set the remote to control several components in succession. After completing this setup, you can perform a series of operations automatically. Enter the setup codes for the components you want to control beforehand.



Keys or controls used in this operation.

Preparing for automatic operations (MACRO play)

1 Make a plan of the macro play you want to set up.

The order of the operations may be fairly complex and you may not be able to remember all of the necessary commands during the setup procedure. Use the space provided below to write down the operations in the order you are going to enter them.

| | | | |
|---|--|---|--|
| ① | | ⑪ | |
| ② | | ⑫ | |
| ③ | | ⑬ | |
| ④ | | ⑭ | |
| ⑤ | | ⑮ | |
| ⑥ | | ⑯ | |
| ⑦ | | ⑰ | |
| ⑧ | | ⑱ | |
| ⑨ | | ⑲ | |
| ⑩ | | ⑳ | |

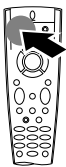
- Up to 20 steps can be memorized for each macro.
- The example below shows the plan for step 4 (which occupies a total of 9 steps) :

| | | |
|---|--------------------|---------|
| 1 | TV + SHIFT + POWER | 3 steps |
| 2 | FUNCTION SHIFT + 4 | 2 steps |
| 3 | VIDEO + VIDEO | 2 steps |
| 4 | SHIFT + POWER | 2 steps |

Total 9 steps

- If you attempt to store more than 20 steps, the remote will output one long blink and exit the macro programming mode.
- Enter channel numbers (for the monitor TV, etc.) exactly as you would using the original remote.

2 Activate the macro program mode.



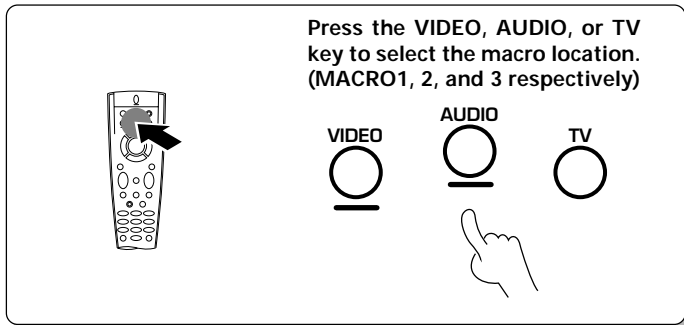
Press and hold the MACRO key until the backlight flashes twice.



Perform each of the following steps within 5 seconds.

continued on next page

3 Select where the macro should be stored.

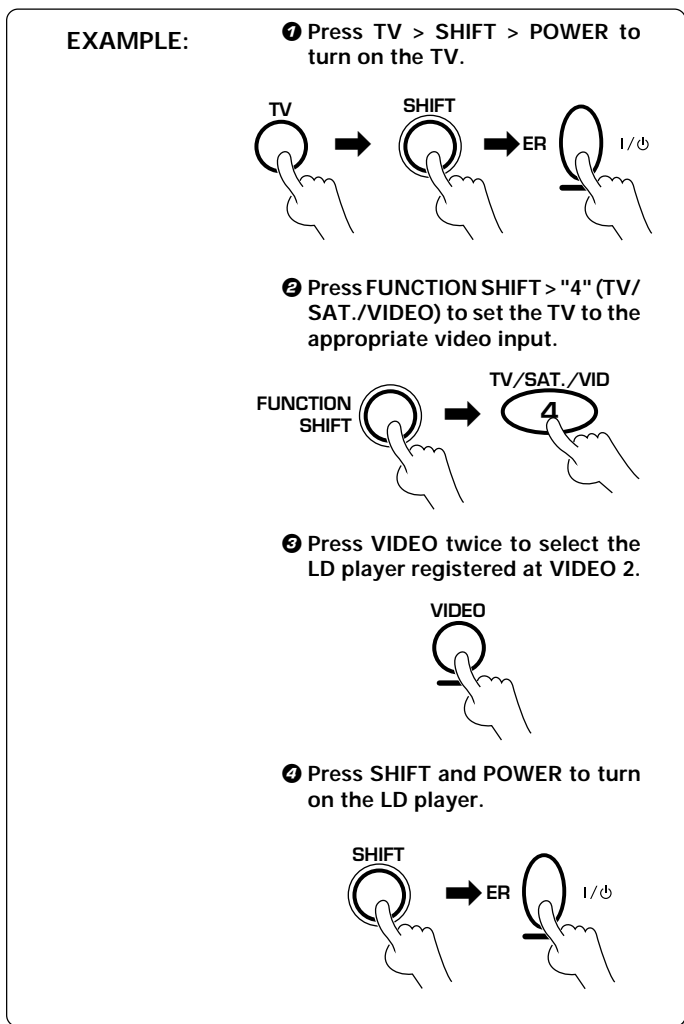


- You can store up to 3 different macros, one at each key: **VIDEO** → "MACRO 1", **AUDIO** → "MACRO 2", **TV** → "MACRO 3"
- The backlight flashes once when you select the macro location.
- Pressing a button other than **VIDEO**, **AUDIO**, or **TV** cancels the macro program mode.

When **VIDEO** is pressed

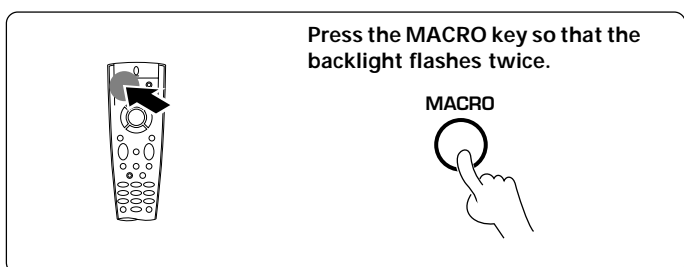


4 Press the keys to be operated in order.



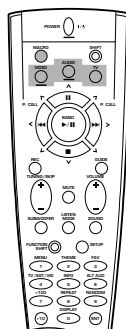
- This example shows you how to create a macro that: turns on the TV, sets the TV to the appropriate input, selects the receiver's input selector to LD, and turns on the LD player. All you have to do is insert the laser disc!
- In order to allow verification of the remote control mode, the name of the selected input appears in the receiver's display when the **VIDEO**, **AUDIO** or **TV** key is pressed. When the **VIDEO** or **AUDIO** key is pressed the receiver's input also changes.

5 Terminate the macro program mode.



- The macro is stored at the locations specified in step 3. If another macro was previously stored at the same location, it is erased.

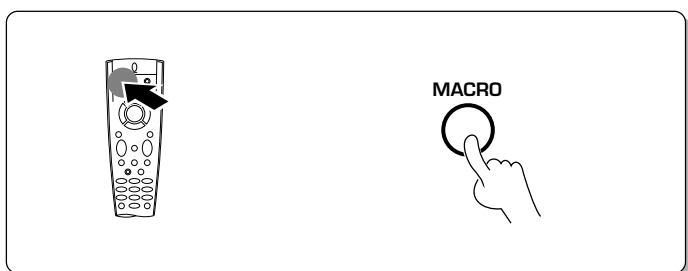
Repeat steps 1 through 5 to program up to 3 macros.



Keys or controls used in this operation.

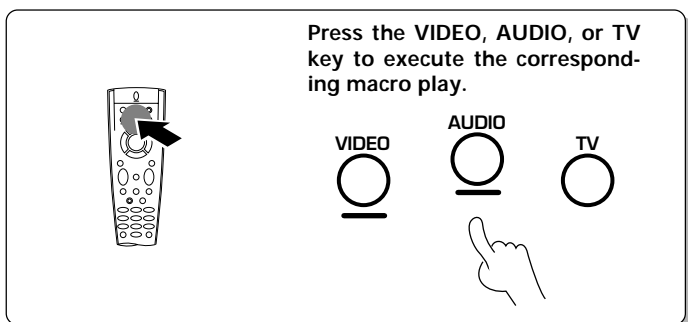
Executing an automatic operation

1 Press the **MACRO** key.



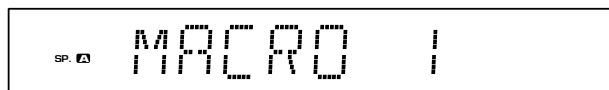
Go to step 2 within 3 seconds.

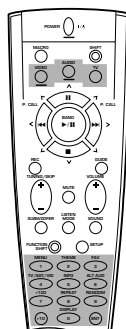
2 Execute the macro play.



- "MACRO" appears in the front panel and on-screen display and the preprogrammed macro is performed:
VIDEO → "MACRO 1", **AUDIO** → "MACRO 2", **TV** → "MACRO 3"
- The remote control flashes once for each command output.
- Some devices take up to 1 second to power on. The macro function has an automatic delay after any power function output.
- Pressing a button other than **AUDIO**, **VIDEO**, or **TV** cancels the macro program mode.

When **VIDEO** is pressed





Keys or controls used in this operation.

Setup code correlation

Deleting a setup code

- ❶ Hold down the ENT key until the backlight flashes twice.
- ❷ Select the component to be deleted.
Press the VIDEO, AUDIO, or TV key repeatedly to select the desired component.
- ❸ Enter the 3 digit code "991".
- ❹ Hold down the ENT key until the backlight flashes twice.

- At this time all inputs become available regardless of any earlier registration.

- Example 1 : To delete the registration of the component connected to the VIDEO 1 jacks, select "VIDEO 1".



Perform each step within 5 seconds.

- To resume the factory settings, proceed step 1, then enter "981".

Checking a setup code

- ❶ Hold down the ENT key until the backlight flashes twice.
- ❷ Select the component with setup code you want to check.
Press the VIDEO, AUDIO, or TV key repeatedly to select the desired component.
- ❸ Enter the 3 digit code "990".
- ❹ Press the 1 key and count the number of times the backlight blinks. This is the first number of the 4 digit setup code.
- ❺ Press the 2 key and count the number of times the backlight blinks. This is the second number of the 4 digit setup code.
- ❻ Press the 3 key and count the number of times the backlight blinks. This is the third number of the 4 digit setup code.
- ❼ Press the 4 key and count the number of times the backlight blinks. This is the fourth number of the 4 digit setup code.

- The backlight flashes twice immediately after the "0" is input to confirm input.

- If the backlight does not blink, the first digit in the setup code is 0.

- If the backlight does not blink, the second digit in the setup code is 0.

- If the backlight does not blink, the third digit in the setup code is 0.

- If the backlight does not blink, the fourth digit in the setup code is 0.



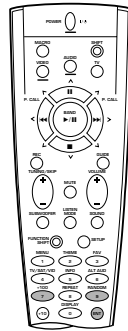
Perform each step within 5 seconds.

FutureSet allows you to update the remote control so it can operate new components which do not appear in the setup code list at the end of the manual.

This function allows you to register new setup codes for any or all of the following command positions:

VIDEO1, VIDEO2, VIDEO3, TV1, TV2, CABLE, CD, TAPE/MD.

FutureSet codes are stored in memory. Each time a FutureSet upgrade is performed, any previous information in the FutureSet memory location is erased. Please inform your customer service representative if FutureSet has been previously used.



Keys or controls used in this operation.

FutureSet upgrade option (KR-V9090 only) (This service will be available until 31 May 1999)

1 Write down the brand name and model number of your component in the space provided before you call.

2 Call our Free-Phone Consumer Help-Line and explain which components you would like to add to your remote control.

UK (including N. Ireland) : 0800-898520

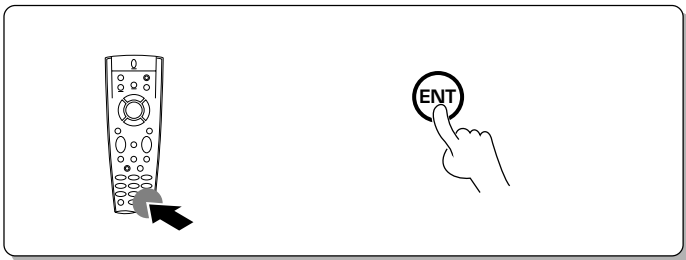
- The free phone upgrade service is not available in countries other than listed above.
- For customers outside the U.K., please contact your Kenwood dealer who will be able to assist you.
- This number is designed specifically for Future Set upgrades, questions about system operation should be first addressed to your place of purchase.

| | Type | Brand | Model No. | Remote Model No. |
|---|------|---------|-----------|------------------|
| | TV | KENWOOD | KV?-???? | RC-???? |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |

- After our customer service representative records the brand name and model number of your component, he/she will ask you to hold the remote to the speaker portion of your telephone as shown below. Your remote control is KENWOOD model number: RC-R0805
- The hours for customer service are:
 Monday-Friday 9:00 am - 7:00 pm (Greenwich time)
 Saturday 9:00 am - 3:00 pm (Greenwich time)

Complete steps 3 and 4 before holding the remote to the speaker portion of your telephone.

3 Hold down the ENT key until the backlight flashes twice.



- At this time all inputs become available regardless of any earlier registration.



Go to step 4 within 5 seconds.

4 Enter the 3 digit code "997".

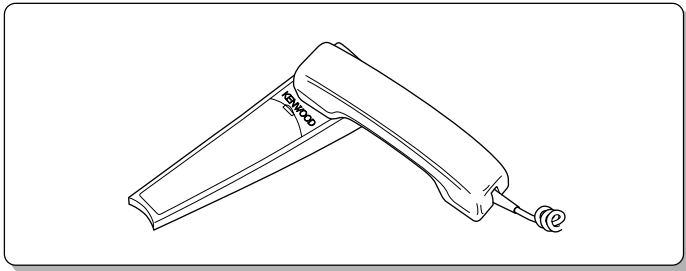


- The backlight flashes twice.
- The remote is now in the upgrade mode. The remote will wait for 30 seconds for a valid telephone download signal. If nothing is received within this time, it will revert to normal operation.



Go to step 5 within 30 seconds.

4 4 **5** Hold your remote to the speaker portion of your telephone.

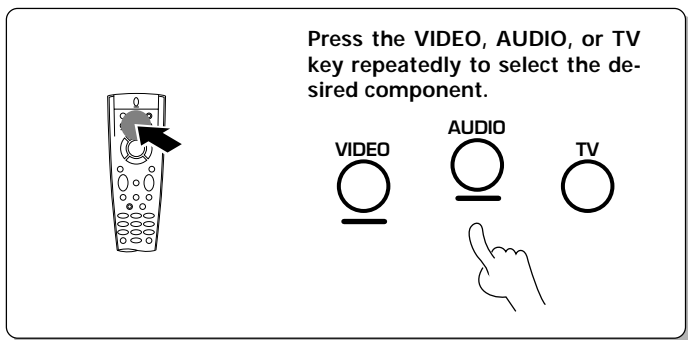


- For each setup code the operator can supply a setup code number. Should you ever need to change your input configuration, this number can be used. Please record for your future reference. If for some reason this information is lost, see "Checking a setup code" in the "Setup code correlation" section for further information.

Code selection after mode download

After successful completion of the download, step 5 above, the remote control automatically enters a special set-up mode which works as described below.

1 Select the component for which you want to register the information downloaded above.



VIDEO key

- ① VIDEO1 (VCR 1)
- ② VIDEO2 (VCR 2)
- ③ VIDEO3 (LD)

AUDIO key

- ① CD (CD)
- ② TAPE/MD (TAPE)
- ③ PHONO

TV key

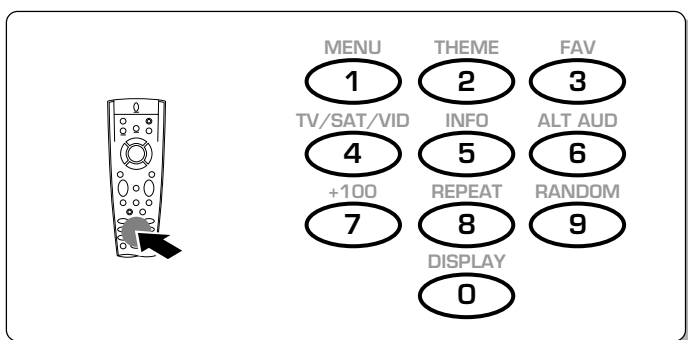
- ① TV1
- ② TV2
- ③ CABLE

- Example 1 : To register a code at the component connected to the VIDEO 1 jacks, select "VIDEO 1 (VCR)".



Perform each of the following steps within 5 seconds.

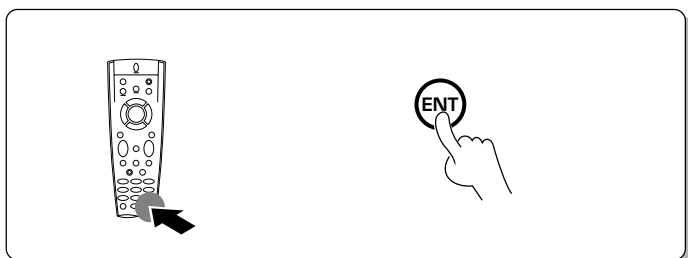
2 Press a numeric key.



- Press the 1 key to output the POWER code of the first component on your list in step 1 of the previous page. Continue to push buttons 2 through 9 (and 0) until the component you want to register turns on.
- Though the FutureSet memory in your remote control is quite large, only 10 setup POWER codes can be put on the 10 keypad at any one time. If you require a larger download, the standard setup procedure can be used. See "Registering setup codes for other components", your customer service representative can supply you with the downloaded setup code numbers.

3 Repeat steps 1 and 2 to register all of the downloaded information.

4 Hold down the ENT key until the backlight flashes twice.



- The setup code for the last POWER code to be sent in step 2 is automatically registered at the location selected in step 1.

- At this time, the remote exits the special set-up mode and returns to its normal operation mode.


Set up code chart

Non-IR codes (KR-V9090 and KR-V8090)

| | |
|---------------|------|
| CD player | 8900 |
| Cassette deck | 7900 |
| LD player | 5900 |
| Phono | 0900 |

| | |
|-----------|------|
| Satellite | 2900 |
| TV | 1900 |
| VCR | 4900 |

| | |
|-----|------|
| DVD | 6900 |
| MD | 8900 |

The set up codes for the remote control supplied with KR-V9090 start below.
The set up codes for the remote control supplied with KR-V8090 start on page 50. 

VCR Set up codes (KR-V9090)

| Maker | Set up codes |
|-------------------|------------------------------|
| Action | 4317 |
| Adventura | 4000 |
| Aiko | 4278 |
| Aiwa | 4000, 4307, 4406 |
| Akai | 4041, 4315 |
| Akiba | 4072 |
| Alba | 4278, 4295 |
| American High | 4035 |
| Amstrad | 4000 |
| Anam | 4162, 4240 |
| Anam National | 4162, 4454 |
| Anitech | 4072 |
| ASA | 4037, 4081 |
| Asha | 4240 |
| Asuka | 4037 |
| Audiovox | 4037 |
| Baird | 4000, 4041, 4104 |
| Basic Line | 4072, 4278 |
| Beaumarck | 4240 |
| Bell & Howell | 4104 |
| Blaupunkt | 4034, 4162 |
| Brandt Electronic | 4041 |
| Broksonic | 4121, 4184, 4211, 4295, 4361 |
| Bush | 4072, 4278 |
| Calix | 4037 |
| Canon | 4035 |
| Carver | 4081 |
| CCE | 4072, 4278 |
| CGE | 4000 |
| Cimline | 4072 |
| Citizen | 4037, 4278 |
| Colt | 4072 |
| Craig | 4037, 4047, 4072, 4240 |
| Crown | 4072, 4278 |
| Curtis Mathes | 4035, 4041, 4060 |
| Cybernex | 4240 |
| Daewoo | 4045, 4046, 4278 |
| Dansai | 4072 |

| Maker | Set up codes |
|-----------------|--|
| De Graaf | 4042 |
| Decca | 4000, 4081 |
| Dual | 4041 |
| Dumont | 4000, 4081, 4104 |
| Dynatech | 4000 |
| Elcotech | 4072 |
| Electrohome | 4037 |
| Electroponic | 4037 |
| Emerex | 4032 |
| Emerson | 4000, 4002, 4037, 4043, 4121, 4184, 4211, 4278, 4295, 4361 |
| ESC | 4240, 4278 |
| Ferguson | 4041 |
| Fidelity | 4000 |
| Finlandia | 4081, 4104 |
| Finlux | 4000, 4042, 4081, 4104 |
| Firstline | 4037, 4043, 4045, 4072 |
| Fisher | 4046, 4047, 4066, 4104 |
| Fuji | 4033, 4035 |
| Fujitsu | 4000 |
| Funai | 4000 |
| Garrard | 4000 |
| GE | 4035, 4060 |
| GEC | 4081 |
| Go Video | 4232, 4350 |
| GoldHand | 4072 |
| Goldstar | 4037, 4038 |
| Goodmans | 4000, 4037, 4072, 4278 |
| Gradiente | 4000 |
| Graetz | 4041, 4104, 4240 |
| Granada | 4046, 4081, 4104 |
| Grandin | 4000, 4037, 4072 |
| Grundig | 4034, 4072, 4081 |
| Hanseatic | 4037 |
| Harley Davidson | 4000 |

| Maker | Set up codes |
|---------------|------------------------|
| Harmon/Kardon | 4038 |
| Harwood | 4072 |
| HCM | 4072 |
| Headquarter | 4046 |
| HI-Q | 4047 |
| Hinari | 4072, 4240 |
| Hitachi | 4000, 4041, 4042, 4240 |
| Hypson | 4072 |
| Imperial | 4000 |
| Interfunk | 4081 |
| ITT | 4041, 4046, 4104, 4240 |
| ITV | 4037, 4278 |
| Jensen | 4041 |
| JVC | 4008, 4041, 4067 |
| Kaisui | 4072 |
| KEC | 4037, 4278 |
| Kenwood | 4038, 4041, 4067 |
| KLH | 4072 |
| Kodack | 4035, 4037 |
| Korpel | 4072 |
| Lenco | 4278 |
| Leyco | 4072 |
| Lloyd | 4000 |
| Loewe | 4037, 4081 |
| Logik | 4072, 4240 |
| Luxor | 4043, 4046, 4048, 4104 |
| LXI | 4037 |
| M Electronic | 4000 |
| Magnavox | 4035, 4039, 4081, 4149 |
| Magnin | 4240 |
| Manesth | 4045, 4072 |
| Marantz | 4035, 4081, 4295 |
| Marta | 4037 |
| Matsui | 4295 |
| Matsushita | 4035, 4162, 4454 |
| MEI | 4035 |

4 6 **VCR Set up codes (KR-V9090) (continued)**

| Maker | Set up codes |
|----------------|--|
| Memorex | 4000, 4035, 4037, 4039, 4046, 4047, 4048, 4104, 4240, 4307 |
| Memphis | 4072 |
| Metz | 4162, 4454 |
| MGA | 4043 |
| MGN Technology | 4240 |
| Minolta | 4042 |
| Mitsubishi | 4043, 4067, 4081, 4173 |
| Motorola | 4035, 4048 |
| MTC | 4000, 4240 |
| Multitech | 4000, 4072 |
| Murphy | 4000 |
| NAD | 4104 |
| NEC | 4038, 4041, 4067, 4104 |
| Neckermann | 4081 |
| Nesco | 4072 |
| Nikko | 4037 |
| Nikon | 4034 |
| Noblex | 4240 |
| Nokia | 4041, 4046, 4048, 4104, 4240 |
| Nordmende | 4041 |
| Oceanic | 4000, 4041 |
| Okano | 4315 |
| Olympus | 4035 |
| Optimus | 4037, 4048, 4104, 4162, 4454 |
| Orion | 4121, 4295 |
| Osaki | 4000, 4037, 4072 |
| Otto Versand | 4081 |
| Palladium | 4037, 4041, 4072 |
| Panasonic | 4035, 4077, 4162, 4454 |
| Pathe Marconi | 4041 |
| Penny | 4035, 4037, 4038, 4042, 4240 |
| Pentax | 4042 |
| Perdio | 4000 |
| Philco | 4035, 4038 |
| Philips | 4035, 4081 |
| Phonola | 4081 |
| Pilot | 4037 |

| Maker | Set up codes |
|----------------|--|
| Pioneer | 4067, 4081 |
| Profitronic | 4240 |
| Proline | 4000 |
| Protec | 4072 |
| Pulsar | 4039 |
| Pye | 4081 |
| Quarter | 4046 |
| Quartz | 4046 |
| Quasar | 4035, 4077, 4162, 4454 |
| Quelle | 4081 |
| Radio Shack | 4000, 4037 |
| Radiola | 4081 |
| Radix | 4037 |
| Randex | 4037 |
| RCA | 4042, 4060, 4077, 4149, 4225 |
| Realistic | 4000, 4035, 4037, 4046, 4047, 4048, 4066, 4104, 4240 |
| Rex | 4041 |
| Ricoh | 4034 |
| Roadstar | 4037, 4072, 4240, 4278 |
| Runco | 4039 |
| Saba | 4041 |
| Salora | 4043, 4046 |
| Samsung | 4045, 4240 |
| Sanky | 4039, 4048 |
| Sansui | 4041, 4067 |
| Sanyo | 4046, 4047, 4104, 4240 |
| SBR | 4081 |
| Schaub Lorentz | 4000, 4041, 4104 |
| Schneider | 4000, 4072, 4081 |
| Scott | 4043, 4045, 4121, 4184, 4211 |
| Sears | 4035, 4037, 4042, 4046, 4047, 4066, 4104 |
| SEG | 4240 |
| SEI | 4081 |
| Selco | 4041 |
| Sharp | 4048 |
| Shintom | 4072, 4104 |
| Shogun | 4240 |
| Siemens | 4037, 4081, 4104 |

| Maker | Set up codes |
|-----------------|--|
| Silva | 4037 |
| Singer | 4045, 4072 |
| Sinudyne | 4081 |
| Sontec | 4037 |
| Sony | 4032, 4033, 4034, 4035 |
| STS | 4042 |
| Sunstar | 4000 |
| Suntronic | 4000 |
| Sylvania | 4000, 4035, 4043, 4081 |
| Symphonic | 4000 |
| Tandy | 4000, 4104 |
| Tashiko | 4000 |
| Tatung | 4000, 4041, 4081 |
| Teac | 4000, 4041 |
| Technics | 4035, 4162 |
| Teknika | 4000, 4035, 4037 |
| Teleavia | 4041 |
| Telefunken | 4041 |
| Tenosal | 4072 |
| Tensai | 4000 |
| Thomson | 4041 |
| Thorn | 4041, 4104 |
| TMK | 4240 |
| Toshiba | 4041, 4043, 4045, 4060, 4066, 4081 |
| Totevision | 4037, 4240 |
| Uher | 4240 |
| Unitech | 4240 |
| Universum | 4000, 4037, 4081, 4240 |
| Vector | 4045 |
| Vector Research | 4038 |
| Victor | 4008, 4041, 4067 |
| Video Concepts | 4045 |
| Videosonic | 4240 |
| Wards | 4000, 4035, 4042, 4047, 4048, 4060, 4072, 4149, 4240 |
| XR-1000 | 4000, 4035, 4072 |
| Yamaha | 4038 |
| Yamishi | 4072 |
| Yokan | 4072 |
| Yoko | 4240 |
| Zenith | 4033, 4034, 4039 |

Satellite Set up codes (KR-V9090)

| Maker | Set up codes |
|--------------------|--------------|
| Echostar | 2280 |
| General Instrument | 2361 |

| Maker | Set up codes |
|-----------|--------------|
| Jerrold | 2361 |
| Primestar | 2361 |

| Maker | Set up codes |
|-----------|--------------|
| Realistic | 2052 |
| Uniden | 2052 |

TV Set up codes (KR-V9090)

| Maker | Set up codes |
|---------------|--|
| Admiral | 1093 |
| Adventura | 1046 |
| Aiko | 1092 |
| Akai | 1030 |
| Alleron | 1179 |
| Ambassador | 1177 |
| Amstrad | 1177 |
| Anam | 1180 |
| Anam National | 1055, 1250 |
| AOC | 1019, 1030, 1137 |
| Audiovox | 1180 |
| Belcor | 1019 |
| Bell & Howell | 1016, 1154 |
| Blue Star | 1282 |
| BPL | 1282 |
| Bradford | 1180 |
| Brockwood | 1019 |
| Bush | 1282 |
| Candle | 1030, 1046, 1056, 1186 |
| Carnivale | 1030 |
| Carver | 1054 |
| Celebrity | 1000 |
| Citizen | 1030, 1039, 1046, 1056, 1060, 1092, 1186, 1280 |
| Concerto | 1056 |
| Contec | 1180 |
| Craig | 1180 |
| Crown | 1039, 1180 |
| Curtis Mathes | 1030, 1039, 1060, 1154 |
| CXC | 1180 |
| Daewoo | 1019, 1039, 1092, 1154, 1451 |
| Daytron | 1019 |
| Dumont | 1017, 1019 |
| Electroband | 1000 |
| Electrohome | 1381 |
| Emerson | 1019, 1039, 1154, 1177, 1178, 1179, 1180, 1236, 1280, 1282, 1463 |
| Envision | 1030 |
| Finlux | 1179 |
| Fisher | 1154, 1159 |
| Fortress | 1093 |
| Fujitsu | 1179 |
| Funai | 1179, 1180 |
| Futuretech | 1180 |
| GE | 1021, 1027, 1047, 1051, 1055, 1135, 1178, 1282, 1451 |
| General | 1186 |
| Gibraltar | 1017, 1019, 1030 |
| Goldstar | 1019, 1030, 1039, 1056, 1178 |
| Goodmans | 1179 |

| Maker | Set up codes |
|------------|--|
| Grandin | 1282 |
| Grunpy | 1179, 1180 |
| Hallmark | 1178 |
| Harvard | 1180 |
| HCM | 1282 |
| Hinari | 1179 |
| Hisawa | 1282 |
| Hitachi | 1056, 1145, 1151 |
| Hypson | 1282 |
| Infinity | 1054 |
| Janeil | 1046 |
| JBL | 1054 |
| JCB | 1000 |
| JVC | 1053 |
| Kaisui | 1282 |
| KEC | 1180 |
| Kenwood | 1019, 1030 |
| Kloss | 1024, 1046 |
| KTV | 1030, 1039, 1180, 1280 |
| Logik | 1016 |
| Luxman | 1056 |
| LXI | 1047, 1054, 1154, 1156, 1178 |
| Magnavox | 1024, 1030, 1054, 1186, 1187 |
| Majestic | 1016 |
| Marantz | 1030, 1054 |
| Matsui | 1177 |
| Matsushita | 1250 |
| Megatron | 1145, 1178 |
| Memorex | 1016, 1056, 1150, 1154, 1178 |
| MGA | 1019, 1030, 1150, 1178 |
| Midland | 1017, 1039, 1047, 1051, 1135 |
| Minutz | 1021 |
| Mitsubishi | 1019, 1150, 1178 |
| Motorola | 1055, 1093 |
| MTC | 1019, 1030, 1056, 1060 |
| Multitech | 1180 |
| NAD | 1156, 1166, 1178 |
| NEC | 1019, 1030, 1056 |
| Nesco | 1179 |
| Nikko | 1030, 1092, 1178 |
| Noshi | 1018 |
| NTC | 1092 |
| Onwa | 1180 |
| Optimus | 1154, 1166, 1250 |
| Optonica | 1093, 1165 |
| Orion | 1177, 1236 |
| Panasonic | 1051, 1055, 1250 |
| Penny | 1018, 1019, 1021, 1027, 1030, 1039, 1047, 1051, 1060, 1135, 1156, 1178 |

| Maker | Set up codes |
|-------------|--|
| Philco | 1019, 1030, 1054 |
| Philips | 1054 |
| Pilot | 1019, 1030, 1039 |
| Pioneer | 1166 |
| Portland | 1019, 1039, 1092 |
| Prism | 1051 |
| Proscan | 1047 |
| Proton | 1031, 1178, 1466 |
| Pulsar | 1017, 1019 |
| Quasar | 1051, 1055, 1165, 1250 |
| Radio Shack | 1019, 1030, 1039, 1047, 1056, 1154, 1165, 1178, 1180 |
| RCA | 1018, 1019, 1047, 1090, 1135 |
| Realistic | 1019, 1030, 1039, 1056, 1154, 1165, 1178, 1180 |
| Runco | 1017, 1030 |
| Saisho | 1177 |
| Sampo | 1030, 1039 |
| Samsung | 1019, 1030, 1039, 1056, 1060, 1178, 1427 |
| Samsux | 1039 |
| Sanyo | 1154, 1159 |
| Scimitsu | 1019 |
| Scotch | 1178 |
| Scott | 1019, 1178, 1179, 1180, 1236 |
| Sears | 1047, 1054, 1056, 1154, 1156, 1159, 1178, 1179 |
| SEI | 1177 |
| Sharp | 1039, 1093, 1165 |
| Shogun | 1019 |
| Signature | 1016 |
| Simpson | 1186, 1187 |
| Sinudyne | 1177 |
| Sony | 1000 |
| Soundesign | 1178, 1179, 1180, 1186 |
| Spectricon | 1137 |
| SSS | 1019, 1180 |
| Starlite | 1180 |
| Supra | 1056 |
| Supre-Macy | 1046 |
| Supreme | 1000 |
| Sylvania | 1030, 1054, 1381 |
| Tandy | 1039, 1093 |
| Tatung | 1055 |
| Technics | 1051, 1250 |
| Technol Ace | 1179 |
| Techwood | 1051, 1056 |
| Teknika | 1016, 1019, 1039, 1054, 1056, 1060, 1092, 1150, 1179, 1180, 1186, 1312 |

4 8 **TV Set up codes (KR-V9090) (continued)**

| Maker | Set up codes |
|------------|------------------|
| Tera | 1031 |
| TMK | 1056, 1177, 1178 |
| Tomashi | 1282 |
| Toshiba | 1060, 1154, 1156 |
| Totevision | 1039 |

| Maker | Set up codes |
|-----------------|--------------|
| Triumph | 1177 |
| Universal | 1027 |
| Vector Research | 1030 |
| Victor | 1053, 1250 |
| Vidikron | 1054 |
| Vidtech | 1019, 1178 |

| Maker | Set up codes |
|--------|---|
| Viking | 1046, 1312 |
| Wards | 1016, 1019, 1021, 1027, 1030, 1054, 1056, 1165, 1178, 1179 |
| Yamaha | 1019, 1030 |
| Zenith | 1016, 1017 |

LD player Set up codes (KR-V9090)

| Maker | Set up codes |
|--------------|--------------|
| Carver | 5194 |
| Disco Vision | 5023 |
| Hitachi | 5023 |
| Kenwood | 5258 |
| Magnavox | 5194 |
| Marantz | 5194 |

| Maker | Set up codes |
|------------|--------------|
| Mitsubishi | 5059 |
| NAD | 5059 |
| Panasonic | 5204 |
| Philips | 5194 |
| Pioneer | 5023, 5059 |

| Maker | Set up codes |
|---------------|--------------|
| Quasar | 5204 |
| Sega | 5023 |
| Sony | 5201 |
| Telefunken | 5059 |
| Theta Digital | 5194 |

DSS Set up codes (KR-V9090)

| Maker | Set up codes |
|------------------------|--------------|
| Alphastar | 3772 |
| Echostar | 3775 |
| HTS | 3775 |
| Hughes Network Systems | 3749 |

| Maker | Set up codes |
|-----------|--------------|
| Jerrold | 3627 |
| Panasonic | 3701 |
| Primestar | 3627 |

| Maker | Set up codes |
|---------|--------------|
| RCA | 3566 |
| Sony | 3639 |
| Toshiba | 3790 |

DVD Set up codes (KR-V9090)

| Maker | Set up codes |
|-----------|--------------|
| Panasonic | 6490 |
| Toshiba | 6503 |

DAT deck Set up codes (KR-V9090)

| Maker | Set up codes |
|---------|--------------|
| Carver | 7158 |
| Denon | 7031 |
| Grundig | 7158 |

| Maker | Set up codes |
|---------|--------------|
| Marantz | 7158 |
| Philips | 7158 |

| Maker | Set up codes |
|----------|--------------|
| Sony | 7093 |
| Technics | 7158 |

MD Set up codes (KR-V9090)

| Maker | Set up codes |
|---------|--------------|
| Kenwood | 9000, 9826 |
| Sony | 9490 |

Cable Set up codes (KR-V9090)

| Maker | Set up codes |
|--------------------|--|
| ABC | 0001, 0003, 0007, 0008, 0011, 0013, 0014, 0017 |
| Antronix | 0022 |
| Archer | 0022, 0153, 0797 |
| Belcor | 0056 |
| Cable Star | 0056 |
| Cabletenna | 0022 |
| Cableview | 0022 |
| Century | 0153 |
| Citizen | 0153 |
| Colour Voice | 0025 |
| Comtronics | 0040 |
| Contec | 0019 |
| Daeryung | 0008 |
| Eastern | 0002 |
| Everquest | 0015, 0040 |
| Garrard | 0153 |
| GC Electronics | 0056 |
| Gemini | 0015 |
| General Instrument | 0011, 0276, 0476 |
| GoldStar | 0040, 0144 |
| Hamlin | 0009, 0020, 0034, 0259 |

| Maker | Set up codes |
|--------------------------|--|
| Hitachi | 0011 |
| Hytex | 0007 |
| Jasco | 0153 |
| Jerrold | 0003, 0011, 0012, 0014, 0015, 0276, 0476 |
| Memorex | 0000 |
| Movie Time | 0063, 0156 |
| NSC | 0063, 0156 |
| Oak | 0007, 0019 |
| Panasonic | 0000, 0021, 0107 |
| Paragon | 0000 |
| Philips | 0025, 0153 |
| Pioneer | 0144, 0753 |
| Prelude | 0770 |
| Pulsar | 0000 |
| PVP Stereo Visual Matrix | 0003 |
| Radio Shack | 0797 |
| RCA | 0021 |
| Regal | 0020, 0259 |
| Regency | 0002 |
| Rembrandt | 0011 |
| Runco | 0000 |
| Samsung | 0040, 0144 |

| Maker | Set up codes |
|--------------------|------------------|
| Scientific Atlanta | 0008, 0017, 0477 |
| Signal | 0015, 0040 |
| Signature | 0011 |
| SL Marx | 0040 |
| Sprucer | 0021 |
| Starcom | 0003, 0015 |
| Stargate | 0015, 0040, 0770 |
| Starquest | 0015 |
| STS | 0156 |
| Sylvania | 0001 |
| Tandy | 0258 |
| Televue | 0040 |
| Texscan | 0001 |
| Tocom | 0012, 0013 |
| Toshiba | 0000 |
| Tusa | 0015 |
| TV86 | 0063 |
| Unika | 0022, 0153 |
| United Artists | 0007 |
| United Cable | 0003 |
| Universal | 0022, 0056, 0153 |
| Viewstar | 0063, 0258 |
| Zenith | 0000, 0525 |

CD Player Set up codes (KR-V9090)

| Maker | Set up codes |
|----------------------|--|
| Aiwa | 8124, 8157 |
| Arcam | 8157 |
| AudioTon | 8157 |
| California Audio Lab | 8029 |
| Carver | 8157, 8179 |
| Cyrus | 8157 |
| Denon | 8003 |
| DKK | 8000 |
| Dynamic Bass | 8179 |
| Elektra | 8393 |
| Emerson | 8305 |
| Fisher | 8048, 8088, 8179 |
| Garrard | 8393 |
| Genexxa | 8032, 8305 |
| Goodmans | 8305 |
| Grundig | 8157 |
| Hitachi | 8032 |
| JVC | 8072, 8655 |
| Kenwood | 8028, 8037, 8048, 8099, 8190, 8858, 8859 |

| Maker | Set up codes |
|-----------|------------------------------------|
| Krell | 8157 |
| Linn | 8157 |
| LXI | 8305 |
| Magnavox | 8157 |
| Marantz | 8029, 8157 |
| Matsui | 8157 |
| MCS | 8029 |
| Memorex | 8032, 8305 |
| Meridian | 8157 |
| Micromega | 8157 |
| Mission | 8157 |
| NAD | 8000 |
| Naim | 8157 |
| NSM | 8157 |
| Onkyo | 8101 |
| Optimus | 8000, 8032, 8037, 8179, 8305, 8468 |
| Panasonic | 8029, 8303 |
| Philips | 8157 |
| Pioneer | 8032, 8305, 8468 |
| Proton | 8157 |

| Maker | Set up codes |
|------------|------------------------|
| QED | 8157 |
| Quad | 8157 |
| Quasar | 8029 |
| RCA | 8053, 8179, 8305 |
| Realistic | 8179 |
| Revox | 8157 |
| Rotel | 8157 |
| SAE | 8157 |
| Sansui | 8157, 8305 |
| Sanyo | 8179 |
| Scott | 8305 |
| Sears | 8305 |
| Sharp | 8037 |
| Sony | 8000, 8185, 8604, 8605 |
| Soundesign | 8145 |
| Tandy | 8032 |
| Teac | 8393 |
| Technics | 8029, 8303 |
| Universum | 8157 |
| Victor | 8072 |
| Yamaha | 8036, 8187 |

Cassette deck Set up codes (KR-V9090)

| Maker | Set up codes |
|---------|--------------|
| Aiwa | 7029, 7197 |
| Arcam | 7076 |
| Carver | 7029 |
| Denon | 7076 |
| Fisher | 7074 |
| Garrard | 7308, 7309 |
| Grundig | 7029 |
| Inkel | 7071 |

| Maker | Set up codes |
|-----------|------------------|
| JVC | 7244, 7273, 7274 |
| Kenwood | 7000, 7071, 7183 |
| Magnavox | 7029 |
| Marantz | 7009, 7029 |
| Onkyo | 7136 |
| Optimus | 7027, 7220 |
| Panasonic | 7229 |
| Philips | 7029 |
| Pioneer | 7027, 7220 |

| Maker | Set up codes |
|----------|------------------|
| Revox | 7029 |
| Sansui | 7009, 7029 |
| Sony | 7170, 7243, 7291 |
| Teac | 7308, 7309 |
| Technics | 7229 |
| Victor | 7244, 7273, 7274 |
| Wards | 7027 |
| Yamaha | 7094, 7097 |

Misc. audio Set up codes (KR-V9090)

| Maker | Set up codes |
|---------|--------------|
| Jerrold | 8459, 8520 |

| Maker | Set up codes |
|--------------------|--------------|
| Scientific Atlanta | 8460 |

| Maker | Set up codes |
|---------|--------------|
| Starcom | 8459 |

The set up codes for the remote control supplied with KR-V8090 start below.
The set up codes for the remote control supplied with KR-V9090 start on page 45. → 45

VCR Set up codes (KR-V8090)

| Maker | Set up codes |
|-------------------|------------------------------------|
| Aiwa | 4000, 4348 |
| Akai | 4041, 4106, 4315 |
| Akiba | 4072 |
| Alba | 4020, 4209, 4278 |
| Ambassador | 4020 |
| Amstrad | 4000 |
| Anitech | 4072 |
| ASA | 4037, 4081 |
| Asuka | 4037 |
| Baird | 4000, 4041, 4104 |
| Basic Line | 4020, 4072, 4278 |
| Blaupunkt | 4006, 4034, 4162, 4195, 4226, 4227 |
| Brandt | 4187, 4320, 4321 |
| Brandt Electronic | 4041 |
| Bush | 4072, 4209, 4278 |
| Catron | 4020 |
| CGE | 4000 |
| Cimline | 4072 |
| Clatronic | 4020 |
| Condor | 4020 |
| Crown | 4020, 4072, 4278 |
| Daewoo | 4020, 4278 |
| Dansai | 4072 |
| De Graaf | 4042, 4166 |
| Decca | 4000, 4081 |
| Dual | 4041 |
| Dumont | 4000, 4081, 4104 |
| Elcotech | 4072 |

| Maker | Set up codes |
|-----------|--|
| ESC | 4240, 4278 |
| Ferguson | 4041, 4320, 4321 |
| Fidelity | 4000 |
| Finlandia | 4081, 4104 |
| Finlux | 4000, 4042, 4081, 4104 |
| Firstline | 4037, 4043, 4045, 4072, 4209 |
| Fisher | 4046, 4104 |
| Frontech | 4020 |
| Funai | 4000 |
| GEC | 4081 |
| General | 4020 |
| GoldHand | 4072 |
| GoldStar | 4037 |
| Goodmans | 4000, 4020, 4037, 4072, 4278 |
| Graetz | 4041, 4104, 4240 |
| Granada | 4046, 4081, 4104 |
| Grandin | 4000, 4037, 4072 |
| Grundig | 4006, 4007, 4034, 4072, 4081, 4195, 4207, 4226, 4347 |
| Hanseatic | 4037 |
| HCM | 4072 |
| Hinari | 4004, 4072, 4240 |
| Hitachi | 4000, 4004, 4041, 4042, 4166, 4240 |
| Hypson | 4072 |
| Imperial | 4000 |
| Ingersol | 4004 |

| Maker | Set up codes |
|--------------|------------------------------------|
| Interfunk | 4081 |
| ITT | 4041, 4046, 4104, 4106, 4240, 4384 |
| ITV | 4037, 4278 |
| JVC | 4041, 4067, 4207, 4384 |
| Kaisui | 4072 |
| Kendo | 4106, 209 |
| Kenwood | 4041 |
| Korpel | 4072 |
| Lenco | 4278 |
| Leyco | 4072 |
| Loewe | 4004, 4006, 4037, 4081 |
| Logik | 4004, 4240 |
| Luxor | 4043, 4046, 4048, 4104, 4106 |
| M Electronic | 4000 |
| Manesth | 4045, 4072 |
| Marantz | 4006, 4081 |
| Matsui | 4004, 4209, 4348 |
| Memorex | 4000, 4037, 4046, 4104 |
| Memphis | 4072 |
| Metz | 4006, 4162, 4195, 4227, 4347 |
| Minerva | 4006, 4195 |
| Mitsubishi | 4043, 4067, 4081 |
| Multitech | 4000, 4072 |
| Murphy | 4000 |
| NEC | 4041, 4067 |
| Neckermann | 4081 |

VCR Set up codes (KR-V8090) (continued)

| Maker | Set up codes |
|---------------|------------------------------------|
| Nesco | 4072 |
| Nokia | 4041, 4046, 4048, 4104, 4106, 4240 |
| Nordmende | 4041, 4320, 4321, 4384 |
| Oceanic | 4000, 4041 |
| Okano | 4315, 4348 |
| Orion | 4004, 4209, 4348 |
| Osaki | 4000, 4037, 4072 |
| Otto Versand | 4081 |
| Palladium | 4006, 4037, 4041, 4072 |
| Panasonic | 4162, 4226, 4227 |
| Pathe Marconi | 4041 |
| Pentax | 4042 |
| Perdio | 4000 |
| Philips | 4081, 4384 |
| Phonola | 4081 |
| Pioneer | 4067, 4081 |
| Portland | 4020 |
| Profex | 4322 |
| Profitronic | 4240 |
| Proline | 4000 |
| Pye | 4081 |
| Quartz | 4046 |
| Quelle | 4081 |
| Radiola | 4081 |

| Maker | Set up codes |
|---------------|------------------------------|
| RCA | 4225 |
| Rex | 4041, 4384 |
| Roadstar | 4037, 4072, 4240, 4278 |
| Saba | 4041, 4207, 4320, 4321, 4384 |
| Saisho | 4004, 4209 |
| Salora | 4043, 4046, 4106 |
| Samsung | 4240, 4432 |
| Sansui | 4041, 4067 |
| Sanyo | 4046, 4104 |
| SBR | 4081 |
| Schaub Lorenz | 4000, 4041, 4104 |
| Schneider | 4000, 4072, 4081 |
| SEG | 4240, 4322 |
| SEI | 4004, 4081 |
| Seleco | 4041 |
| Sentra | 4020 |
| Sharp | 4048 |
| Shintom | 4072, 4104 |
| Shorai | 4004 |
| Siemens | 4006, 4037, 4081, 4104, 4195 |
| Silva | 4037 |
| Singer | 4045 |
| Sinudyne | 4004, 4081 |

| Maker | Set up codes |
|------------|--|
| Solavox | 4020 |
| Sontec | 4037 |
| Sony | 4032, 4033, 4034 |
| Sunkai | 4348 |
| Sunstar | 4000 |
| Suntronic | 4000 |
| Tashiko | 4000 |
| Tatung | 4000, 4041, 4081 |
| Tec | 4020 |
| Technics | 4162, 4226 |
| Teleavia | 4041 |
| Telefunken | 4041, 4187, 4320, 4321, 4384 |
| Tenosal | 4072 |
| Tensai | 4000, 4322 |
| Thomson | 4041, 4320, 4384 |
| Thorn | 4041, 4104 |
| Toshiba | 4041, 4043, 4045, 4081, 4384 |
| Towada | 4322 |
| Uher | 4240 |
| Universum | 4000, 4006, 4037, 4081, 4106, 4195, 4240 |
| Yamishi | 4072 |
| Yokan | 4072 |
| Yoko | 4020, 240 |

TV Set up codes (KR-V8090)

| Maker | Set up codes |
|----------------|------------------------------|
| Acura | 1009 |
| Admiral | 1087, 1163 |
| Adyson | 1217 |
| Akai | 1208, 1361 |
| Akura | 1218 |
| Alba | 1009, 1037, 1218, 1371 |
| Allorgan | 1294 |
| Amplivision | 1217 |
| Amstrad | 1009, 1371 |
| Anitech | 1009 |
| Arcam | 1216, 1217 |
| ASA | 1087 |
| Asuka | 1218 |
| Atlantic | 1206 |
| Audiosonic | 1037, 1109 |
| Autovox | 1087, 1206 |
| Baird | 1343 |
| Bang & Olufsen | 1087 |
| Basic Line | 1009, 1218 |
| Baur | 1010, 1037, 1349, 1361, 1512 |
| Beko | 1370 |
| Beon | 1037 |
| Binatone | 1217 |
| Blaupunkt | 1191, 1195, 1200, 1327, 1328 |

| Maker | Set up codes |
|--------------------|--|
| Blue Sky | 1218 |
| Blue Star | 1282 |
| Bondstec | 1247 |
| Boots | 1217 |
| BPL | 1282 |
| Brandt | 1109, 1335 |
| Briorega | 1087 |
| Britannia | 1216 |
| Bruns | 1087 |
| BSR | 1294 |
| BTC | 1218 |
| Bush | 1009, 1037, 1218, 1282, 1294, 1349, 1371, 1374, 1519 |
| Cascade | 1009 |
| Cathay | 1037 |
| Centurion | 1037 |
| Century | 1087 |
| CGE | 1247 |
| Cimline | 1009 |
| Clarivox | 1037 |
| Clatronic | 1247, 1370 |
| Condor | 1320, 1370 |
| Contec | 1009, 1216 |
| Continental Edison | 1399 |
| Crosley | 1087 |

| Maker | Set up codes |
|----------------|------------------------------------|
| Crown | 1009, 1037, 1370, 1418 |
| CS Electronics | 1216 |
| CTC | 1247 |
| Cybertron | 1218 |
| Daewoo | 1009, 1037, 1374 |
| Dainichi | 1218 |
| Dansai | 1037 |
| Dayton | 1009 |
| De Graaf | 1208, 548 |
| Decca | 1037, 1072 |
| Dixi | 1009, 1037 |
| Dual | 1519 |
| Dual Tec | 1217 |
| Dumont | 1087 |
| Elin | 1037, 1548 |
| Elite | 1218, 1320 |
| Elta | 1009 |
| Emerson | 1087, 1361 |
| Erres | 1037 |
| Expert | 1206 |
| Ferguson | 1037, 1109, 1238, 1287, 1335, 1343 |
| Fidelity | 1216, 1361 |
| Finlandia | 1208, 1359 |
| Finlux | 1037, 1072, 1087 |

TV Set up codes (KR-V8090) (continued)

| Maker | Set up codes |
|----------------|------------------------------------|
| Firstline | 1009, 1216, 1217, 1247, 1294, 1321 |
| Fisher | 1208, 1217, 1370 |
| Flint | 1455 |
| Formenti | 1037, 1087, 1320 |
| Frontech | 1163, 1247, 1264 |
| Fujitsu | 1072, 1206 |
| Funai | 1264, 1294 |
| GEC | 1037, 1072, 1217 |
| Geloso | 1009 |
| Genexxa | 1163, 1218 |
| GoldStar | 1037, 1109, 1217 |
| Goodmans | 1037, 1072, 1317, 1343, 1371, 1374 |
| Gorenje | 1370 |
| GPM | 1218 |
| Graetz | 1163, 1361 |
| Granada | 1037, 1072, 1208, 1217, 1359 |
| Grandin | 1282 |
| Grundig | 1191, 1195 |
| Hanseatic | 1037, 1320, 1361 |
| HCM | 1009, 1282 |
| Hinari | 1009, 1037, 1218 |
| Hisawa | 1282, 1455 |
| Hitachi | 1109, 1163, 1217, 1225, 1349, 1548 |
| Huanyu | 1216, 1374 |
| Hypson | 1037, 1264, 1282 |
| ICE | 1217, 1264, 1371 |
| Imperial | 1247, 1370, 1418 |
| Indiana | 1037 |
| Ingelen | 1163 |
| Inno Hit | 1072 |
| Interfunk | 1037, 1163, 1247, 1361, 1512 |
| Intervision | 1102, 1217, 1264 |
| Isukai | 1218 |
| ITS | 1371 |
| ITT | 1163, 1361, 1548 |
| JVC | 1053, 1094, 1371 |
| Kaisui | 1009, 1216, 1217, 1218, 1282 |
| Kapsch | 1163, 1206 |
| Kathrein | 1556 |
| Kenwood | 1313 |
| Kingsley | 1216 |
| Kneissel | 1435 |
| Korpel | 1037 |
| Korting | 1087 |
| Koyoda | 1009 |
| Leyco | 1037, 1072, 1264, 1294 |
| Liesenk & Tter | 1037 |
| Loewe | 1075, 1087, 1289, 1512 |
| Luma | 1206 |
| Luxor | 1349, 1361 |

| Maker | Set up codes |
|--------------|--|
| M Electronic | 1009, 1037, 1109, 1163, 1217, 1287, 1374 |
| Magnadyne | 1087, 1102, 1247 |
| Magnafon | 1102 |
| Manesth | 1217, 1264, 1320 |
| Marantz | 1037 |
| Marelli | 1087 |
| Mark | 1037 |
| Matsui | 1009, 1011, 1035, 1037, 1072, 1208, 1217, 1294, 1371 |
| Mediator | 1037 |
| Memorex | 1009 |
| Metz | 1087 |
| Mitsubishi | 1087, 1108, 1512 |
| Mivar | 1216, 1313 |
| MTC | 1349, 1512 |
| Multitech | 1009, 1102, 1216 |
| Neckermann | 1037, 1087, 1191, 1349, 1556 |
| NEI | 1037 |
| Nikkai | 1035, 1037, 1072, 1216, 1218, 1264 |
| Noblisko | 1102 |
| Nokia | 1361, 1548 |
| Nordmende | 1109, 1287, 1343 |
| Oceanic | 1163, 1361 |
| Orion | 1037, 1294, 1320, 1321 |
| Osaki | 1072, 1217, 1218, 1264 |
| Oso | 1218 |
| Osume | 1072, 1157 |
| Otake | 1317 |
| Otto Versand | 1037, 1191, 1217, 1320, 1343, 1349, 1512, 1556 |
| Otto-Versand | 1010 |
| Palladium | 1370 |
| Panama | 1217, 1264 |
| Panasonic | 1126, 1163, 1226, 1250 |
| Pathe Cinema | 1216, 1238, 1320 |
| Pausa | 1009 |
| Perdio | 1320 |
| Philco | 1087, 1247 |
| Philips | 1037, 1087, 1374, 1556 |
| Phoenix | 1087 |
| Phonola | 1037, 1087 |
| Pioneer | 1109, 1163, 1287 |
| Profex | 1009, 1361 |
| Proline | 1321 |
| Protech | 1009, 1037, 1102, 1217, 1247, 1264 |
| Quelle | 1010, 1011, 1037, 1200, 1327, 1328, 1361, 1512 |
| R-Line | 1037 |
| Radiola | 1037 |

| Maker | Set up codes |
|---------------|--|
| Radiomarelli | 1087 |
| RCA | 1090 |
| Rediffusion | 1361 |
| Revox | 1037 |
| Rex | 1163, 1206, 1264 |
| RFT | 1087 |
| Roadstar | 1009, 1218, 1264 |
| Saba | 1075, 1087, 1109, 1163, 1287, 1335, 1343 |
| Saccs | 1238 |
| Saisho | 1009, 1011, 1264 |
| Salora | 1163, 1349, 1359, 1361, 1548 |
| Sambers | 1102 |
| Samsung | 1009, 1037, 1217, 1264, 1370, 1556 |
| Sandra | 1216 |
| Sanyo | 1011, 1072, 1157, 1208 |
| SBR | 1037 |
| Schaub Lorenz | 1361 |
| Schneider | 1037, 1218, 1247, 1371, 1394 |
| SEG | 1217, 1264 |
| SEI | 1087, 1102, 1294 |
| Sei-Sinudyne | 1010 |
| Seleco | 1163, 1206 |
| Sentra | 1035 |
| Sharp | 1093 |
| Shorai | 1294 |
| Siarem | 1087, 1102 |
| Siemens | 1157, 1191, 1195, 1200, 1327, 1328 |
| Singer | 1087 |
| Sinudyne | 1087, 1102, 1294 |
| Solavox | 1163 |
| Sonitron | 1208 |
| Sonoko | 1009, 1037 |
| Sonolor | 1163, 1208 |
| Sontec | 1037 |
| Sony | 1010, 1011 |
| Soundwave | 1037, 1418 |
| Standard | 1009, 1217, 1218 |
| Stern | 1163, 1206 |
| Sunkai | 1294, 1321 |
| Susumu | 1218 |
| Sysline | 1037 |
| Tandy | 1072, 1163, 1217, 1218 |
| Tashiko | 1217, 1359 |
| Tatung | 1037, 1072, 1217 |
| Tec | 1217, 1247 |
| Technema | 1320 |
| Technics | 1250 |
| Teleavia | 1343 |
| Telefunken | 1109, 1335, 1343 |
| Telemeister | 1320 |
| Teletch | 1009 |

TV Set up codes (continued) (KR-V8090)

| Maker | Set up codes |
|----------------|------------------------------|
| Teleton | 1206, 1217, 1349 |
| Tensai | 1218, 1294, 1317, 1320 |
| Texet | 1216 |
| Thomson | 1109, 1287, 1343, 1349, 1399 |
| Thorn | 1035, 1037, 1072, 1361, 1512 |
| Thorn-Ferguson | 1343 |
| Tomashi | 1282 |

| Maker | Set up codes |
|-----------|------------------|
| Toshiba | 1035 |
| Uher | 1206, 1320 |
| Ultravox | 1102 |
| Universum | 1037, 1264, 1370 |
| Vestel | 1037 |
| Videosat | 1247 |
| Visa | 1009, 1163 |
| Vision | 1320 |

| Maker | Set up codes |
|--------------------|------------------|
| Voxson | 1087, 1163 |
| Waltham | 1217 |
| Watson | 1037, 1320 |
| Watt Radio | 1102 |
| Wega | 1087 |
| White Westinghouse | 1037, 1216, 1320 |
| Yoko | 1037, 1217, 1264 |
| Zanussi | 1206 |

Satellite Set up codes (KR-V8090)

| Maker | Set up codes |
|----------------|------------------------------|
| Akai | 2515 |
| Alba | 2362, 2421, 2455, 2515, 2613 |
| Aldes | 2288 |
| Amstrad | 2080, 2252, 2345, 2461 |
| Ankaro | 2220, 2288, 2369 |
| Anttron | 2183, 2421 |
| Armstrong | 2243 |
| AST | 2351 |
| Astra | 2108 |
| Astro | 2173 |
| Axis | 2369 |
| Best | 2369 |
| Blaupunkt | 2173 |
| Boca | 2243, 2513 |
| BT | 2515, 2668 |
| Bush | 2067 |
| Cambridge | 2344, 2515 |
| Channel Master | 2362 |
| Commlink | 2288 |
| Connexions | 2396 |
| Crown | 2243 |
| DDC | 2362 |
| DNT | 2200, 2396 |
| Echostar | 2396 |
| Emanon | 2421 |
| Ferguson | 2067, 2183, 2336 |
| Fidelity | 2252 |
| Finlux | 2108, 2344, 2455 |
| Freecom | 2421 |
| Fuba | 2369, 2396, 2421 |
| G-Sat | 2183 |
| Galaxis | 2288 |
| Gooding | 2571 |

| Maker | Set up codes |
|--------------|------------------------------------|
| Grundig | 2173, 2571, 2750 |
| Hinari | 2183 |
| Hirschmann | 2173, 2573 |
| Hitachi | 2455 |
| Houston | 2668 |
| Huth | 2220, 2288 |
| Intervision | 2592 |
| ITT | 2108 |
| JVC | 2515 |
| Kathrein | 2092, 2173, 2200, 2442, 2504, 2658 |
| Kreiselmeier | 2173 |
| Kyostar | 2421 |
| La Sat | 2513, 2607 |
| Lenco | 2421 |
| Lennox | 2592 |
| Lupus | 2369 |
| Luxor | 2108, 2573 |
| Manhattan | 2455, 2592 |
| Marantz | 2200 |
| Maspro | 2092, 2336 |
| Matsui | 2344, 2571 |
| Mediamarkt | 2243 |
| Minerva | 2571 |
| Morgan's | 2243, 2513 |
| Newhaus | 2220 |
| Nikko | 2360, 2713 |
| Nokia | 2108, 2455, 2573 |
| Nordmende | 2362 |
| Orbitech | 2501 |
| Oxford | 2344 |
| Pace | 2067, 2183, 2336, 2455, 2791 |
| Palladium | 2571 |

| Maker | Set up codes |
|------------|------------------------|
| Palsat | 2501 |
| Panda | 2455 |
| Philips | 2200, 2292, 2455 |
| Phonotrend | 2288, 2592 |
| Promax | 2455 |
| Prosat | 2288 |
| Quadral | 2362, 2628 |
| Radiola | 2200 |
| Radix | 2396 |
| RFT | 2200, 2220, 2288 |
| Saba | 2336 |
| Sabre | 2455 |
| Salora | 2108 |
| SAT | 2351, 2461 |
| Satec | 2183 |
| SatPartner | 2421 |
| Schwaiger | 2183, 2504 |
| Seemann | 2396 |
| SEG | 2369, 2421 |
| Siemens | 2173 |
| Skymaster | 2288, 2628 |
| Sunstar | 2513 |
| Tantec | 2336, 2455 |
| TechniSat | 2262, 2501 |
| Telefunken | 2421 |
| Teleka | 2243, 2613 |
| Thomson | 2455 |
| Tonna | 2668 |
| Triad | 2351 |
| Universum | 2173, 2571 |
| Ventana | 2200 |
| Vortec | 2421 |
| Vtech | 2351 |
| Wisi | 2173, 2351, 2396, 2455 |

LD player Set up codes (KR-V8090)

| Maker | Set up codes |
|---------|------------------|
| Kenwood | 5258 |
| Marantz | 5064, 5194 |
| Philips | 5064, 5194, 5388 |

| Maker | Set up codes |
|---------|--------------|
| Pioneer | 5059 |
| Radiola | 5388 |
| Salora | 5064 |

| Maker | Set up codes |
|------------|--------------|
| Sony | 5193, 5201 |
| Telefunken | 5059 |

5 4 CD Player Set up codes (KR-V8090)

| Maker | Set up codes |
|----------------------|---------------------------------------|
| Akai | 8156 |
| Alba | 8603, 8615 |
| Amstrad | 8603 |
| Arcam | 8157 |
| AudioTon | 8157 |
| Bush | 8615 |
| California Audio Lab | 8029 |
| Condor | 8134 |
| Cyrus | 8157 |
| Denon | 8003, 8034 |
| Fisher | 8048 |
| Grundig | 8157 |
| JVC | 8072 |
| Kenwood | 8028, 8099, 8190, 8523, 8692, 8826 |

| Maker | Set up codes |
|------------|------------------|
| Linn | 8157 |
| Luxman | 8589, 8778 |
| Marantz | 8029, 8157 |
| Matsui | 8157, 8288 |
| MCS | 8029 |
| Memorex | 8032 |
| Meridian | 8157 |
| Micromega | 8157 |
| Mitsubishi | 8156 |
| NAD | 8000 |
| Naim | 8157 |
| Onkyo | 8101 |
| Panasonic | 8029, 8303, 8367 |
| Philips | 8157 |
| Pioneer | 8032 |

| Maker | Set up codes |
|-----------|--------------|
| Quad | 8157 |
| Quasar | 8029 |
| Radiotone | 8615 |
| Revox | 8157 |
| Rotel | 8157 |
| Schneider | 8134, 8615 |
| Sharp | 8037 |
| Sony | 8000 |
| Technics | 8029, 8303 |
| Toshiba | 8481, 8692 |
| Universum | 8157 |
| Watson | 8615 |
| Yamaha | 8036, 8187 |

Cassette deck Set up codes (KR-V8090)

| Maker | Set up codes |
|---------|--|
| Grundig | 7029 |
| Kenwood | 7000, 7071, 7092, 7183, 7205, 7233, 7234 |
| Marantz | 7029 |

| Maker | Set up codes |
|-----------|------------------|
| Memorex | 7099, 7101 |
| Onkyo | 7135, 7136 |
| Panasonic | 7229 |
| Philips | 7029 |
| Pioneer | 7027, 7099, 7101 |

| Maker | Set up codes |
|----------|--------------|
| Revox | 7029 |
| Sharp | 7205 |
| Sony | 7170, 7243 |
| Technics | 7229 |
| Yamaha | 7205 |

Cable Set up codes (KR-V8090)

| Maker | Set up codes |
|-----------------|--------------|
| British Telecom | 0105 |
| Decsat | 0423 |
| Jerrold | 0003, 0276 |

| Maker | Set up codes |
|--------------------------|--------------|
| PVP Stereo Visual Matrix | 0003 |
| Scientific Atlanta | 0008, 0277 |

| Maker | Set up codes |
|--------------|--------------|
| United Cable | 0003 |
| Westminster | 0105 |

DAT deck Set up codes (KR-V8090)

| Maker | Set up codes |
|---------|--------------|
| Grundig | 7158 |
| Kenwood | 7216, 7252 |

| Maker | Set up codes |
|---------|--------------|
| Marantz | 7158 |
| Philips | 7158 |

| Maker | Set up codes |
|----------|--------------|
| Sony | 7093 |
| Technics | 7158 |

MD deck Set up codes (KR-V8090)

| Maker | Set up codes |
|---------|--------------|
| Kenwood | 9000, 9826 |
| Sony | 9490 |

DVD deck Set up codes (KR-V8090)

| Maker | Set up codes |
|-----------|--------------|
| Panasonic | 6490 |
| Toshiba | 6503 |

Misc. audio Set up codes (KR-V8090)

| Maker | Set up codes |
|--------------------|--------------|
| Jerrold | 8459, 8520 |
| Scientific Atlanta | 8460 |
| Starcom | 8459 |

Resetting the Microcomputer

If the microcomputer may malfunction (unit cannot be operated, or shows an erroneous display) if the power cord is unplugged while the power is ON, or due to some other external factor. If this happens, execute the following procedure to reset the microcomputer and return the unit to its normal operating condition.

With the power cord plugged in, turn the POWER key OFF. Then, while holding down the ON/STANDBY key, press POWER.

- Please note that resetting the microcomputer will clear the contents of the memory and returns the unit to the state it was in when it left the factory.

Amplifier

| Symptom | Cause | Remedy |
|--|---|---|
| No sound from the speakers. | <ul style="list-style-type: none"> • The speaker cords are disconnected. • VOLUME is set to the minimum position. • MUTE is ON. • The SPEAKERS switches are set to OFF. | <ul style="list-style-type: none"> • Connect them properly referring to "Connecting the speakers" → 12 • Adjust the volume to a proper level. • Turn OFF the MUTE. → 19 • Set the SPEAKERS switch(es) to ON. → 18 |
| The standby indicator blinks and sound is not output. | <ul style="list-style-type: none"> • Speaker cords are short-circuited. | <ul style="list-style-type: none"> • Turn the power off, eliminate the short-circuiting, then turn on the power again. → 12 |
| Sound is not output from one of the speakers. | <ul style="list-style-type: none"> • The speaker cord is disconnected. • The speaker balance is set to an extreme position. | <ul style="list-style-type: none"> • Connect it properly referring to "Connecting the speakers". • Adjust the speaker levels using the test tone. → 15 |
| Sound is not output from the rear (surround) speakers and/or the center speaker, or their sound is very small. | <ul style="list-style-type: none"> • The rear speaker cords and/or the center speaker cord is disconnected. • A surround mode has not been engaged. • The rear and/or center volume controls are set to the minimum level. | <ul style="list-style-type: none"> • Connect it properly referring to "Connecting the speakers". • Select a surround mode. • Adjust the speaker levels using the test tone. → 15 |
| A humming noise is generated when the PHONO input selector is selected. | <ul style="list-style-type: none"> • The audio cord from the turntable is not connected to the PHONO jacks. • The turntable is not grounded. | <ul style="list-style-type: none"> • Insert the audio cord plugs securely into the PHONO jacks. • Connect the grounding wire to the GND terminal on the rear panel. |

Tuner

| Symptom | Cause | Remedy |
|--|--|---|
| Radio Stations cannot be received. | <ul style="list-style-type: none"> • No antenna is connected. • The broadcast band is not set properly. • The frequency of the desired station is not tuned. | <ul style="list-style-type: none"> • Connect an antenna. • Set the broadcast band properly. • Tune the frequency of the desired station. → 23 |
| Interference. | <ul style="list-style-type: none"> • Noise due to ignition noise from an automobile. • Noise due to interference from an electric appliance. • Noise due to a nearby TV set. | <ul style="list-style-type: none"> • Install the outdoor antenna away from the road. • Turn off the power to the appliance. • Install the receiver farther away from the TV. |
| A station which was preset cannot be received by pressing the corresponding numeric key. | <ul style="list-style-type: none"> • The preset station belongs to a frequency that cannot be received. • The preset memory was cleared because the power cord had been unplugged for a long period of time. | <ul style="list-style-type: none"> • Preset a station with a receivable frequency. • Preset the station again. |

continued on next page

Remote control unit

| Symptom | Cause | Remedy |
|---|---|---|
| The backlight flashes five times during normal operation. | <ul style="list-style-type: none"> The batteries are nearing exhaustion. | <ul style="list-style-type: none"> Replace with new batteries to preserve the currently registered setup information. → 13 |
| Subwoofer volume cannot be adjusted. | <ul style="list-style-type: none"> Subwoofer is OFF. | <ul style="list-style-type: none"> Turn the subwoofer ON. → 14 |
| Certain inputs cannot be selected using the remote control. | <ul style="list-style-type: none"> No preset codes registered at for the respective input(s). | <ul style="list-style-type: none"> Register a preset code or Non-IR code at the respective input(s). → 35 |
| Remote control operation is not possible. | <ul style="list-style-type: none"> The remote control is set to a different operation mode. Batteries are exhausted. The remote control unit is too far away from the main system, controlling angle is too large, or there is an obstacle between the receiver and the remote. The audio cords and system control cords are not connected properly. No software is loaded in the source component. An attempt is made to play a tape which is being recorded in the cassette deck. The remote control has not been set to the operation mode for the component you wish to control. The microprocessor of the remote control malfunctions. | <ul style="list-style-type: none"> Press VIDEO, AUDIO, or TV to select the appropriate operation mode. Replace with new batteries. If the backup is exhausted before you can replace the batteries, redo the setup procedure. → 13 → 35 Operate the remote control unit within the controllable range. Connect properly referring to "Setting up the system". → 8 Place software in the source component you want to play. Wait until recording has completed. Press the VIDEO, AUDIO, or TV key to activate the operation mode for the component you want to control before operation. → 37 Reset the microprocessor. → 42 |



Do not use contact cleaning agents because they could cause a malfunction. Be specifically careful against using contact cleaning agents containing oil, since they may deform the plastic components.

Memory back up function

Please note that the following items will be deleted from the unit's memory if the power cord is disconnected from the AC outlet or the main power switch is turned off for approximately 3 days.

- Power mode.
- Settings made (like SURROUND SET UP).
- Input selector settings.
- Volume level.
- Broadcast band.
- Frequency setting.
- Preset stations.

AUDIO section

| | |
|--|-------------------------------|
| Rated power output during STEREO operation | |
| (KR-V9090) | |
| (DIN) 1 kHz, 0.7% at 4 Ω | 120 W + 120 W |
| (IEC) 63 Hz ~ 12.5 kHz, 0.7% at 4 Ω | 120 W + 120 W |
| (KR-V8090) | |
| (DIN) 1 kHz, 0.7% at 4 Ω | 110 W + 110 W |
| (IEC) 63 Hz ~ 12.5 kHz, 0.7% at 4 Ω | 110 W + 110 W |
| Rated power output during SURROUND operation | |
| (KR-V9090) | |
| FRONT(1kHz, 0.7% T.H.D. at 4 Ω) | 120 W + 120 W |
| CENTER (1kHz, 0.7% T.H.D. at 4 Ω) | 120 W |
| SURROUND(1kHz, 0.7% T.H.D. at 4 Ω) | 60 W + 60 W |
| (KR-V8090) | |
| FRONT(1kHz, 0.7% T.H.D. at 4 Ω) | 110 W + 110 W |
| CENTER (1kHz, 0.7% T.H.D. at 4 Ω) | 110 W |
| SURROUND(1kHz, 0.7% T.H.D. at 4 Ω) | 110 W |
| Total harmonic distortion | |
| (KR-V9090) | 0.015 % (1kHz, 60 W, 4 Ω) |
| (KR-V8090) | 0.015 % (1kHz, 55 W, 4 Ω) |
| Frequency response | |
| CD | 5 Hz ~ 85 kHz, +0.5 dB, -3 dB |
| Signal to noise ratio (DIN) | |
| PHONO (MM) | 62 dB |
| CD | 60 dB |
| Input sensitivity / impedance | |
| PHONO (MM) | 2.5 mV / 47 kΩ |
| CD | 200 mV / 47 kΩ |
| ADAPTOR IN | 400 mV / 10 kΩ |
| Output level / impedance | |
| TAPE REC | 200 mV / 1 kΩ |
| ADAPTOR OUT | 200 mV / 1 kΩ |
| PRE OUT (CENTER, SURROUND) | 1 V / 600 Ω |
| PRE OUT (SUBWOOFER) | 1 V / 1 kΩ |
| Tone control | |
| BASS | ± 8 dB (at 100 Hz) |
| TREBLE | ± 8 dB (at 10 kHz) |
| LOUDNESS control | |
| VOLUME at -40dB level | +7 dB(100 Hz), +3 dB(10 kHz) |

VIDEO section

| | |
|------------------------|---------------|
| VIDEO inputs / outputs | |
| VIDEO (composite) | 1 Vp-p / 75 Ω |

FM tuner section

| | |
|---|---|
| Tuning frequency range | 87.5 MHz ~ 108 MHz |
| Usable sensitivity (DIN, 75 Ω) | |
| MONO | 1.2μV / 13.2 dBf (40 kHz DEV., S/N 26 dB) |
| STEREO | 35μV / 42.1 dBf (46 kHz DEV., S/N 46 dB) |
| Total harmonic distortion (DIN, 1 kHz) | |
| MONO | 0.2 % (65.2 dBf input) |
| STEREO | 0.5 % (65.2 dBf input) |
| Signal to noise ratio (DIN weighted, 1 kHz) | |
| MONO | 65 dB (40 kHz DEV., 65.2 dBf input) |
| STEREO | 60 dB (46 kHz DEV., 65.2 dBf input) |
| Stereo separation (DIN, 1 kHz) | 40 dB |
| Selectivity (DIN, ±300 kHz) | 64 dB |
| Frequency response (30 Hz ~ 15kHz) | +0.5 dB, -3.0 dB |

AM tuner section

| | |
|---|---------------------|
| Tuning frequency range | 531 kHz ~ 1,602 kHz |
| Usable sensitivity (30% mod., S/N 20 dB) | |
| | 16 μV / (600 μV/m) |
| Signal to noise ratio (30 % mod., 1 mV input) | 48 dB |

GENERAL

| | |
|-------------------|----------------------|
| Power consumption | |
| (KR-V9090) | 330 W |
| (KR-V8090) | 280 W |
| AC outlet | |
| SWITCHED | 2 (total 100 W max.) |
| Dimensions | |
| | W : 440 mm |
| | H : 147 mm |
| | D : 392 mm |
| Weight (Net) | |
| (KR-V9090) | 11 kg |
| (KR-V8090) | 10 kg |



KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Remote operation of other components

Refer to the following for the type of remote control operations available for each component. The setup code for each component must be entered beforehand.

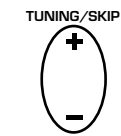
- 1 Use the **AUDIO**, **VIDEO**, or **TV** keys to select the component you want to control.
- 2 Press the keys corresponding to the operations you desire. Refer to the following sections for details.

- When pressing keys in succession, press each key firmly and be sure to wait at least 1 second before pressing the next key.
- Numeric keys function the same as the numeric keys on the original remote.
- To execute a **FUNCTION SHIFT** command, press the **FUNCTION SHIFT** key, then press the corresponding key within 3 seconds.

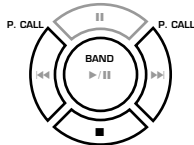


1. Although each setup code is designed to work with a number of different models, certain codes may not work with some models. (Also, certain codes may only operate some of the functions available on a given model.)
2. The charts below show the typical functions available for each component. Some manufacturers use different key combinations to perform similar functions. For that reason, we have programmed extra functions on some of the unused number keys to help you control your equipment. To find if your component has extra functions, press the **FUNCTION SHIFT** key, then press a number key. Repeat this procedure for each number key.

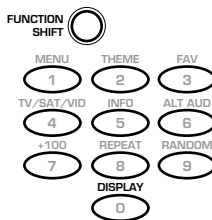
Tuner operations



TUNING - 23

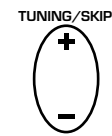


- ▶/|| (BAND - 23)
- (AUTO - 23)
- ◀◀ (P.CALL - 27)
- ▶▶ (P.CALL + - 27)

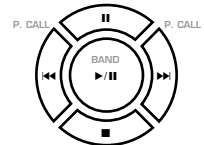


FUNCTION SHIFT commands
DISPLAY (Dimmer - 33)

Cassette deck operations



- + (▶ Play)
- (◀ Play)

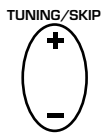


- ▶/|| (▶ Play)
- || (Pause)
- (Stop)
- ◀◀ (◀◀ Rewind)
- ▶▶ (▶▶ Fast forward)

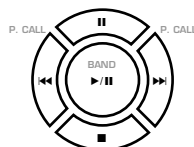


(● Record)

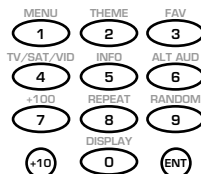
CD player operations



- + (Disc Skip +)
- (Disc Skip -)



- ▶/|| (Play/Pause {for SL16})
- ▶/|| (▶ Play {for other})
- || (Pause {for other})
- (Stop)
- ◀◀ (Skip)
- ▶▶ (Skip)

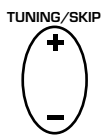


Numeric keys

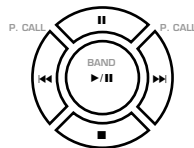


FUNCTION SHIFT commands
REPEAT (Repeat)
RANDOM (Random)
DISPLAY (Dimmer)

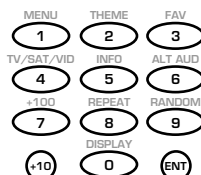
MD recorder operations



- + (▶▶ Search)
- (◀◀ Search)



- ▶/|| (▶ Play)
- || (Pause)
- (Stop)
- ◀◀ (Skip back)
- ▶▶ (Skip forward)

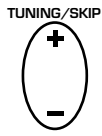


Numeric keys

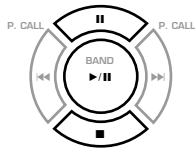


FUNCTION SHIFT commands
+100 (+100)
REPEAT (Repeat)
RANDOM (Random)
DISPLAY (Dimmer)

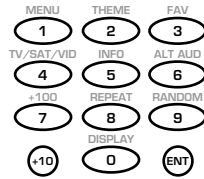
TV operations



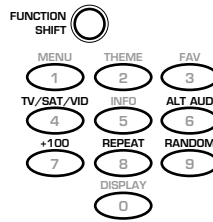
+ (Channel +)
- (Channel -)



▶/|| (Mute)
|| (Volume +)
■ (Volume -)

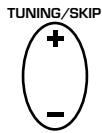


Numeric keys

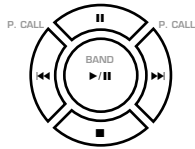


FUNCTION SHIFT commands
TV/SAT./VID (Input selector)
ALT AUDIO (Alternate audio)
+100 (TV TEXT)
REPEAT (Text off)
RANDOM (MIX)

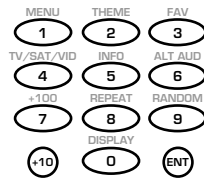
VCR operations



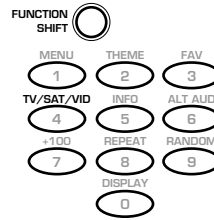
+ (Channel +)
- (Channel -)



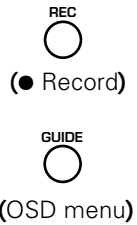
▶/|| (▶ Play)
 || (Pause)
 ■ (Stop)
 ◀◀ (◀◀ Rewind)
 ▶▶ (▶▶ Fast forward)



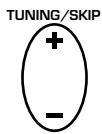
Numeric keys



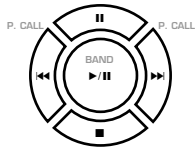
FUNCTION SHIFT commands
TV/SAT./VID (Input selector)



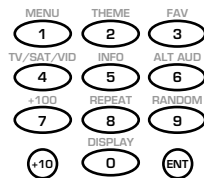
LD player operations



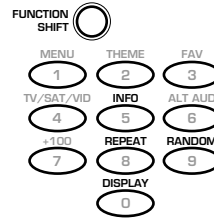
+ (A, A/B)
- (B)



▶/|| (▶ Play)
 || (Pause)
 ■ (Stop)
 ◀◀ (◀◀ Skip back)
 ▶▶ (▶▶ Skip forward)



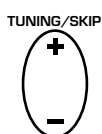
Numeric keys



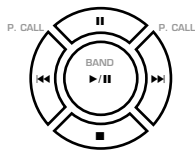
FUNCTION SHIFT commands
INFO (Frame-time)
REPEAT (Repeat)
RANDOM (Random)
DISPLAY (Display)



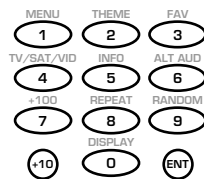
Satellite tuner operations



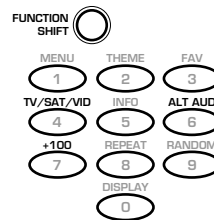
+ (Channel +)
- (Channel -)



▶/|| (Select)
 || (↑)
 ■ (↓)
 ◀◀ (←)
 ▶▶ (→)



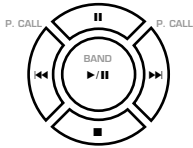
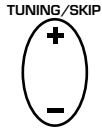
Numeric keys



FUNCTION SHIFT commands
TV/SAT./VID (Input selector)
ALT AUDIO (Alternate audio)
+100 (+100)

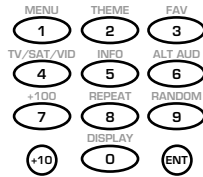


Cable tuner operations

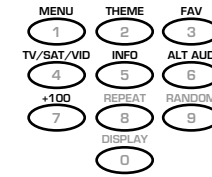


+ (Channel +)
- (Channel -)

▶/|| (Select)
|| (↑)
■ (↓)
◀◀ (←)
▶▶ (→)



Numeric keys

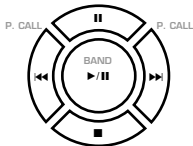
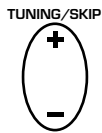


FUNCTION SHIFT commands

MENU (Menu)
THEME (Theme)
FAV. (Favorite)
TV/SAT./VID (Input selector)
INFO (Page)
ALT AUDIO (Alternate audio)
+100 (+100)

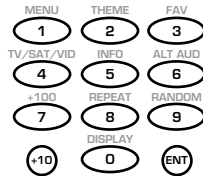


DVD player operations

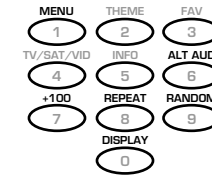


+ (Disc skip +)
- (Disc skip -)

▶/|| (▶ Play)
|| (Pause)
■ (Stop)
◀◀ (Skip back)
▶▶ (Skip forward)



Numeric keys



FUNCTION SHIFT commands

ALT AUDIO (Alternate audio)
+100 (+100)
REPEAT (Repeat)
RANDOM (Random)
DISPLAY (Display)



KENWOOD

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model _____ Serial Number _____